13/5

MAY 1954
VOL. III No. 4

TAXON

Official News Bulletin of the International Association for Plant Taxonomy, Edited and Published for I.A.P.T. by the International Bureau for Plant Taxonomy and Nomenclature, 106 Lange Nieuwstraat, Utrecht, Netherlands

INDEX BRYOLOGICUS

by

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During the 5th Botanical Congress at Cambridge, 1930, a meeting was held in which all bryological members of the Congress took part. One of the subjects discussed at this meeting concerned the Index Bryologicus. It was decided that the Index should be completed, and a committee was appointed to make the necessary preparations. At that time the Berlin Museum of Natural History was already in possession of some manuscript notes and it was decided that, if possible, these materials should be used (vide Ann. Bryol. 4: 152. 1931).

In Chronica Botanica 1: 71. 1935 we are informed that the Botanical Section of the International Union of Biological Sciences decided that an Index Bryologicus should be compiled.

It is very interesting to read the paper published by the late H. N. Dixon in Ann. Bryol. 9: 1 (1936): On a new Index Bryologicus. It begins in this way: "Preparations are being made for a new Index Bryologicus. It is more than 35 years since the publication of the 2nd edition of Paris' Index, and the output of bryological literature in the meantime has been very great." Then follows a discussion of what such an Index should contain and the taxonomic standard on which the work should be based. As to the contents it seemed desirable that the Index should indicate (a) genus and type species of genus, (b) name of species, with author, publication and date, (c) synonyms, (d) distribution, (e) type of species (collector, locality, reference number, etc.) and (f) present locale of species type.

So far as we know this was the last time the project of continuing the Index was mentioned. Since then nothing has been done to organize such a continuation. Now already 54 years have elapsed since the publication of the 2nd edition of Paris' Index, and the necessity of an up to date Index is very strongly felt. Therefore it seems desirable to hold at the Paris Congress in July a meeting of all bryologists present in order to discuss once more the measures to prepare a new Index Bryologicus.

Dixon's project is too extensive, and would delay the execution of the work. It seems reasonable to restrict the contents of the Index to names of genera and species (and, if possible, of varieties and forms) with author, publication, date and distribution. In this way the Index will be comparable with the Index Kewensis, and we believe that no one will doubt the usefulness of such a work.

To compile the items the disinterested coöperation of many bryologists all over the world is needed. The way in which this coöperation is to be obtained can be discussed at Paris. The International Association for Plant Taxonomy will, probably, be prepared to give its support to the administrative part of the work, including the final redaction and the publication.

ALICE EASTWOOD

1859 — 1953

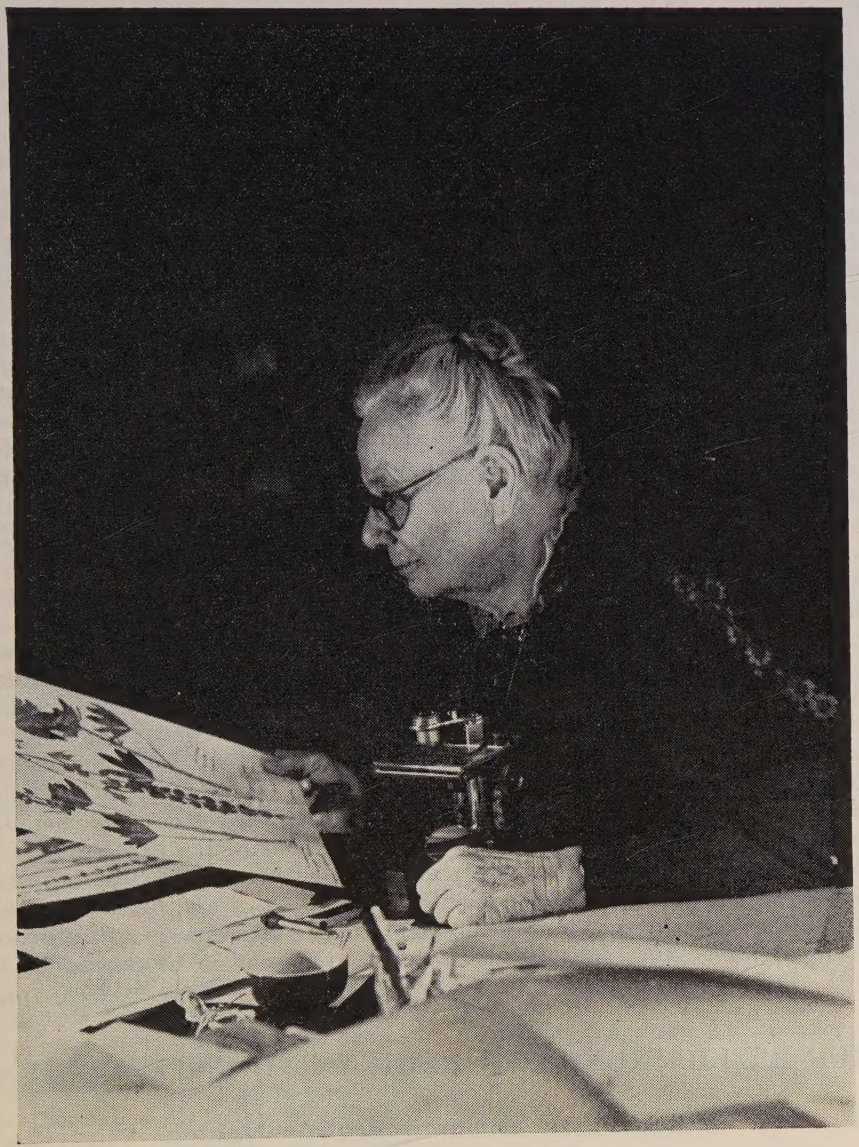
Miss Alice Eastwood, Curator of Botany Emeritus at the California Academy of Sciences, died on October 30, 1953, in San Francisco, California. In spite of her advanced age, she was in good health and lived, independent and alone, in a small cottage until May of last year when she fell and broke her hip. Following this accident, she was apparently recovering and in excellent spirits, when in September a reaction set in with complications that led to her death. She was buried in Toronto, Canada.

Alice Eastwood, the daughter of Eliza Jane Gowdey and Colin Skinner Eastwood, was born on January 19, 1859, in Toronto, Canada. Her mother died when Alice was six, and after attending public schools for a time, she was placed in a convent where she received much of her early education. In 1873, she went to live in Denver, Colorado, where she attended the public schools, graduating from the East Denver High School in 1879. This was the end of her formal education, for at the beginning of the next school term, she was engaged as a teacher in the high school from which she had just graduated. She held this position for about ten years, when, as a result of the successful investment of her small salary, she had an assured income sufficient for her to retire from teaching and turn her entire attention to botany and travel.

After a short visit in the eastern United States, she made her first trip to California in the winter and spring of 1890 and 1891. In April, she visited the California Academy of Sciences in San Francisco in order to call on the well-known American botanist, Townshend Stith Brandegee, whose wife, Katharine, was then Curator of Botany in that institution. Miss Eastwood then returned to Denver, planning to devote herself to the study of the flora of Colorado and the desert parts of Utah. However, in 1892, she accepted a curatorial position offered her by Mrs. Brandegee and she returned to San Francisco to make her home. In 1894, when the Brandegees moved with their library and herbarium to San Diego, California, Miss Eastwood became Curator, a position she held with honor and distinction until she retired on her ninetieth birthday in 1949.

In her long career in Botany, Miss Eastwood is remembered for several outstanding accomplishments, any one of which would have brought renown to a botanist. Endowed with a strong physical constitution, she could endure the hardships of arduous field work and she early distinguished herself for her botanical exploration of remote regions of the western United States, notably in southwestern Colorado and adjacent Utah, and in the Coast Ranges of California south of San Francisco Bay. At the time of the disastrous 1906 San Francisco earthquake and fire, when the museum, library, and most of the natural history collections of the Academy were burned, Miss Eastwood rescued the botanical types and was responsible for saving the early records of the institution. A detailed account of her heroic action is given in *Science* (new series, 23 : 824-826, — 1906).

With the reëstablishment of the Academy museum, Miss Eastwood returned in 1912 from the eastern United States and Europe where she had been studying and began the task of rebuilding the herbarium and botanical library. At the time of her retirement in 1949, the herbarium numbered more than 340,000 specimens and the library contained several thousand botanical works. She generally paid her own expenses on field trips, offering them as a contribution to the Academy, and her extensive purchases of books were designed to round out the botanical library already on the shelves of the Academy. Always generous and responsive to the needs



Miss Eastwood's picture: taken in the herbarium just before her 80th birthday in Jan. 1939.

of her department, she was named a Patron of the Academy in 1930 in recognition of her generosity. Plans are now advanced for the construction of an Alice Eastwood Hall of Botany at the Academy which will contain a public exhibition as well as the herbarium and botanical library. One of the most beautiful and appealing memorials honoring Miss Eastwood is the noble grove of the California redwood, *Sequoia sempervirens*, which has been purchased through the generous donations of many friends and which will be added to the system of California state parks as the Alice Eastwood Grove.

A 1949 bibliography of Miss Eastwood's writings (Proc. Calif. Acad. Sci.. series 4, 25 : XV—XXIV) lists more than 300 titles. Although many of her papers present analytical revisions and propose new species, a number of her contributions are descriptive articles on the occurrence of plants written for the non-botanical public or are brief floristic notes giving range extensions, new weed records, etc. Her critical botanical studies were concerned chiefly with west American Liliaceae as well as with the difficult problems among the American representatives of the genera *Lupinus*, *Arctostaphylos*, and *Castilleja*. For many years she was interested in a more precise scientific nomenclature for garden plants and some of her articles deal with the taxonomy of exotics cultivated in California. One of her few books is "A Handbook of the Trees of California" (Occasional Paper, Calif, Acad. Sci. IX, — 1905). Before the San Francisco Fire, Miss Eastwood served for a time as editor of the Brandegee journal *Zoe* and was an assistant editor of the Jepson journal, *Erythea*. In 1932 Miss Eastwood and Mr J. T. Howell established the journal *Leaflets of Western Botany*, now continuing in its seventh volume.

Miss Eastwood was one of the most coöperative of botanists, and correspondents in many parts of the United States and elsewhere were helped by collections or data she placed at their disposal. Her memory is honored in the names of two American genera, *Eastwoodia* Brandegee of the Compositae and *Aliciella* Brand of the Polemoniaceae, as well as in the name *Antirrhinum* sect. *Eastwoodiella* Munz of the Scrophulariaceae. Numerous species and varieties of western North American plants have been dedicated to her.

Through the years Miss Eastwood received ample recognition for her distinguished accomplishments both at home and abroad. She was a Fellow of the California Academy as well as of the American Association for the Advancement of Science; and in "American Men of Science", she is the only woman whose name has been starred in every edition for outstanding accomplishment. In numerous botanical, dendrological, and horticultural societies at home and abroad she was an honorary member or an honorary officer, and several organizations bestowed on her distinguished service medals. Volume 25 of the Fourth Series of the Proceedings of the California Academy of Sciences was published under the title "Alice Eastwood Semi-centennial Publications" in appreciation of fifty years of service to the Academy. The crowning honor of her career was her appointment as an honorary president of the Seventh International Botanical Congress in Stockholm in 1950.

John Thomas Howell

ZUR BEZEICHNUNG DER REIHEN UND UNTERREIHEN

vom

Botanischen Museum Berlin—Dahlem

Bei der Bezeichnung der Reihen, auch Ordnungen genannt (engl. order, frz. ordre, holländ. orde, lat. ordo), hat sich in der Taxonomie fast ganz allgemein die Endung *-ales* durchgesetzt, die von Bentham et Hooker, Gen. Plant. 1862/67 eingeführt wurde. Das trifft nicht nur für die höheren Pflanzen zu, sondern auch für die Reihen bei den verschiedenen Gruppen der Algen, Pilze, Moose und Farne. Als Beispiele sei hier nur auf einige grössere Werke verwiesen:

Engler-Prantl, Nat. Pflanzenfamilien, 2. Auflage, ab 1925.

Engler-Diels, Syllabus der Pflanzenfamilien, 11. Aufl. 1936.

Wettstein, Handb. der Systemat. Bot., 4. Aufl. 1933/35.

F. E. Fritsch, Structure and reproduction of Algae. I-II. 1935, 1945.

O. Tippo, Modern classification of the Plant kingdom. In Chron. Bot. 7 : 203. 1942.

C. A. Arnold, Introduction to Paleobotany, 1947.

G. H. Lawrence, Taxonomy of Vascular Plants. 1951.

Takhtalan, Phylogenetic principles of the

system of Higher Plants. In Bot. Review 19 : 1. 1953.

Die Internationalen Nomenklaturregeln haben dem Rechnung getragen und die Endung *-ales* für die Reihen festgelegt: Vgl. Intern. Regeln der Bot. Nomenkl. 1935, Empfehl. IX, und Intern. Code Bot. Nomencl. 1952, Art. 27.

Anders liegen die Verhältnisse bei den Unterreihen (subordo). Für diese ist von A. Engler zum ersten Male in der 2. Auflage des Syllabus der Pflanzenfamilien (1898) die Endung *-ineae* in die Taxonomie eingeführt worden, offenbar in Anlehnung an *-inae*, mit welcher Endung Eichler, Syllabus 3. Aufl. (1883) Reihen zu bezeichnen pflegte. Die meisten Autoren folgten Engler in diesem Verfahren, und auch die Nomenklaturregeln haben diese Endung festgelegt; vgl. I.C.B.N. 1952, Art. 27. In einigen Werken finden sich jedoch Abweichungen, so z.B. in Fritsch, Manual of Phycology, wo für die Unterreihen *-oideae* neben *-ineae* gebraucht wird.

Hinzu kommt, dass andere Autoren die Endung *-ineae* (neben *-inae*) für taxonomische Kategorien oberhalb der Reihen anwenden, so Tippo, l.c. 1942 bei einigen Klassen-Namen, z.B. *Equisetineae, Lycopodineae.* Wettstein, l.c. 1935 p. 98/100 bezeichnet mit dieser Endung einige Klassen bzw. Unterklassen. Und Des Abbayes, Traité de Lichénologie (1951) bezeichnet die Kategorie oberhalb der Reihen, seine sous-série, mit *-ineae*!

Die Endung *-ineae* für die Unterreihen erscheint aber auch aus anderen Gründen recht unglücklich gewählt. Sie kann wegen ihres weitgehenden Gleichklanges mit der Endung *-inae* (jetzt für eine Subtribus!) leicht zu Irrtümern führen. So gibt z.B. Swingle, Textb. Syst. Bot. (1946) p. 290 an, Eichler habe in seinem System (Syll. 3. Aufl. 1883) die Klassen *Equisetineae, Lycopodineae, Filicineae.* Dies ist aber ein Irrtum, denn Eichler hat die Klassen *Equisetinae, Lycopodinae, Filicinae* genannt.

Da ferner für die Bezeichnung der Tribus die Endung *-eae* festgelegt ist, würde man sprachlich die Endung *-ineae* eher für die Kennzeichnung einer Subtribus halten, für die aber die Endung *-inae* festgelegt ist. Vgl. I.C.B.N. 1952, Art. 29.

Es handelt sich hierbei nicht um theoretische Bedenken, sondern um tatsächliche, in der taxonomischen Namensgebung vorhandene Unzulänglichkeiten, die sich in der Praxis bei der Bearbeitung der 12. Auflage von Engler, Syllabus der Pflanzenfamilien ergeben haben, und für die eine Änderung notwendig erscheint.

Aus diesen Gründen stellen die Unterzeichneten den Antrag, in analoger Bildung zu *-phyta* und *-phytina* bei der Bezeichnung der Unterreihen (subordo) die bisherige, von A. Engler eingeführte Endung *-ineae* durch *-inales* zu ersetzen. Durch den partiellen Gleichklang infolge der Ableitung der Endung *-inales* von der Endung *-ales* wird sofort ersichtlich, dass es sich bei den Rangstufen-Bezeichnungen mit diesen Endungen um Reihen-Kategorien handelt. Es ergibt sich ausserdem der Vorteil, dass notwendig werdende Zwischenkategorien zwischen Unterreihe und Familie (sog. Familiengruppen) die Endung *-ineales* erhalten könnten, für die von manchen Autoren (z.B. Fritsch, l.c. Vol. I) die hierfür unzulässigen Endungen *-eae* (p. 291, 555) oder *-oideae* (p. 362, 714) verwendet werden.

Durch Eliminierung der Endung *-ineae* für die Unterreihen (subordo) und Ersatz durch *-inales* würde die Skala der Endungen folgendes Bild ergeben:

Reihe: *-ales*
Unterreihe: *-inales* (neuer Vorschlag)
Familie: *-aceae*
Unterfamilie: *-oideae*
Tribus: *-eae*
Subtribus: *-inae*

Es würden also lauten:

Reihe (ordo): z.B. *Malvales, Ericales, Geraniales.*

Unterreihe: (subordo): z.B. *Malvinales, Ericinales, Geraniinales* (an Stelle bisher: *Malvineae, Ericineae, Geraniineae).*

Tribus (tribus): z.B. *Malveae, Ericeae, Geranieae.*

Subtribus (subtribus): z.B. *Malvinae, Ericinae, Geraniinae.*

Proposal no. 180

Vorschlag C zu Article 27.

Es ist zu ersetzen "Suborders are designated in a similar manner, with the ending *-ineae*" durch: "Suborders are designated in a similar manner, with the ending *-inales*".

In den Beispielen: "suborders *Bromeliineae, Malvineae*" zu ersetzen durch: "*Bromeliinales, Malvinales*".

E. Werdermann
H. Melchior
H. Reimers
F. Mattick
G. M. Schulze
G. Schulze-Menz
J. Mildbraed

Note on the Typification of the Generic Name Bombax L.

by

D. Chatterjee (New Delhi) & M. B. Raizada (Dehra Dun)

The generic name *Bombax* was published by Linnaeus *(Sp. Plant.* 511. 1753) and at the time of its publication, it was accompanied by names and descriptions of three species. Two of these were soon transferred to other genera i.e. *Ceiba* and *Cochlospermum.* Therefore the third species i.e. *Bombax ceiba* L., according to Art. 62 of the International Rules of Botanical Nomenclature (1952), should form the type of the generic name *Bombax.* One of the synonyms of *Bombax ceiba* as given by Linnaeus, however, happened to be *Moul Elavou* of Rheede which represented an Asiatic plant while the major part of *Bombax ceiba* represented an American plant. According to the rules, the major part of *Bombax ceiba* should form the type of the genus *Bombax,* and a name has to be found for the residue which happens to refer to an Asiatic plant in this case.

The subject has been discussed earlier by Bakhuizen (*Bull. Jard. Bot. Buitenzorg* 6: 161. 1924), Furtado (*Gard. Bull. Str. Settlm.* 10: 173. 1939) and Chatterjee and Raizada (*Indian Forester* 76: 139. 1950) and it is not proposed to comment on this again in detail. The present note has been prepared with the hope of drawing the attention of our colleagues to two specific points. (1) What generic name is to be applied for the Asiatic plant which is different from the American (species of *Bombax*), and (2) whether the generic name *Bombax* L. could be typified by the Asiatic plant commonly called *Bombax malabaricum* DC., as proposed by Miss M. L. Green a few years ago on page 160 of the proposals of British Botanists (about 1938), originally intended to be considered for the International Botanical Congress of 1940.

Bakhuizen suggested that the Asiatic plant be called *Gossampinus heptaphylla* under the genus *Gossampinus* Buch. Ham. This generic name was not validly published by Buchanan-Hamilton with a proper description, but in 1827 Schott and Endlicher validated the name (*Melet. Bot.* 35. 1827) by supplying a description. These authors however, did not include the Asiatic plant under this genus and proposed simultaneously (*l.c.*) the generic name *Salmalia* Schott et Endl. for the Asiatic species. It will therefore be clear, that the generic name *Bombax,* being restricted to American species is not applicable to the Asiatic plant. The name *Gossampinus* Buch. Ham. which was proposed to designate the Asiatic plant was, in first instance, not validly published and later after the validation of the generic name an American species was designated by it. For these two reasons, also *Gossampinus* has to be rejected. We are therefore left with *Salmalia* Schott et Endl. as the generic name to designate the Asiatic plant whose correct name should be *Salmalia malabarica* (DC.) Schott et Endl.

It now remains to decide whether the genus *Bombax* Linn. could be typified by the name *Bombax malabaricum* DC. as proposed by Miss M. L. Green. This, of course, is not acceptable as it will be against the principles laid down by Art. 62 of the rules. We therefore suggest that the following proposal may be considered by the Nomenclature Section of the next International Botanical Congress to be held at Paris in July 1954.

Proposal no. 181

The genus *Bombax* L. is already typified (under Art. 62 of the Rules) by *Bombax ceiba* L. *(pro maxima parte)* and should continue to remain so. The proposal of Miss M. L. Green (made on page 160 of the proposals by British Botanists, *circa* 1938) that the generic name *Bombax* L. be typified by a much later name i.e. *Bombax malabaricum* DC. may be rejected.

TYPIFICATION OF AMARYLLIS BELLADONNA L.

by

Hamilton P. Traub (Arcadia, California)

In the present paper, evidence in support of the typification of *Amaryllis belladonna* L., which has been discussed in detail by Traub & Moldenke (1949) is briefly reviewed and brought up-to-date.

In connection with the preparation of the writer's taxonomic monograph on the *Amaryllidaceae* (tribes, genera and species) for the printer, it is necessary to consider this subject as it affects the family group as a

whole. Since species epithets may not be conserved, the typification is reviewed briefly here; the case for the typification of the generic name, *Amaryllis* L., will be briefly reviewed in another paper prepared for Taxon.

In the following frank presentation, the statements should in no instance be interpreted as reflecting on the personal integrity of anyone. The discussion is concerned with the issues only and not personalities and petty-fogging which have no place in taxonomy as a science. It should be realized that when the case was first presented *), Appendix I of the Code had not been provided as a guide. Thus it is natural that some of the material presented is now irrevelant because it is automatically ruled out. Such irrelevancy should therefore not be interpreted as reflecting on the personal integrity of anyone.

A MAP NEEDED TO FIND WAY OUT OF MAZE

The case for the typification of *Amaryllis belladonna* L., as stated by one school of thought *) has been based largely on circumstantial "evidence", and it is difficult to follow the pertinent facts in relation to the Code. In order to make it possible for the reader to follow the subject without too great effort, a general summary, such as is commonly used in other scientific papers, is given at the beginning:

It can be definitely shown (1) that the original type element of the name, *Amaryllis belladonna* L. (1753) is the American Belladonna; (2) that in 1760, Philip Miller made three erroneous claims that brought confusion into the consideration of the subject, and somewhat influenced Linnaeus' presentation 9 years after 1753 in Sp. Pl. ed. 2. 1762. Linnaeus however did not remove the original type element, the American Belladonna with a *hollow* peduncle (Sloane, 1707), but added a secondary discordant element (omitted in 1753), the Cape Belladonna, with a *solid* peduncle; and emended the phrase-name slightly to mention the recurved cohering keels at the apexes of the outer tepalsegs, a character which is present in both plants, but varying in some details; and (3) that the Cape plant remained as a secondary discordant element under the name, from 1762 to 1783, when Lamarck proposed the first valid name for the Cape plant, *Amaryllis rosea* Lamarck, which can be recognized under the International Code, a fact that was not even mentioned by those holding the opposing view; and (4) that the attempt to usurp the name, *Amaryllis belladonna* L., for the Cape plant is apparently based on sentimental reasons because it can be shown that such switching of names would cause serious trouble when considered in relation to the Family as a whole (see article by Traub, to be published in another issue of Taxon): (a) the Cape plant, *Brunsvigia rosea* (Lamarck) Hann., is so closely related to other species of *Brunsvigia* Heist. (1753), that any self-respecting taxonomist worth his salt cannot keep them separate on biologic grounds; the Cape plant crosses with typical *Brunsvigia* species, resulting in hybrids, more or less fertile, thus indicating that the chromosomes (which are 2n = 22 in each case as far as investigated) are more or less compatible; (b) the morphological characters of the Cape plant differ from those of *Brunsvigia* on the species level only (no decided gaps), and thus not at all on the generic level (a decided gap); and (c) *Amaryllis* L. is the type of the familial name and cannot be erased, and thus the usurpation of the name for the Cape plant would require that all *Brunsvigia* species and the *Amaryllis* L. (1753); (syn.: *Hippeastrum* Herb. (1821)) species be shifted from a stabilized nomenclature since 1938, and thus cause a large number of un-necessary name changes — 11 names now under *Brunsvigia* and never referred to *Amaryllis*, and 15 names now under *Amaryllis* L. (1753) and never referred to the synonym, *Hippeastrum* Herb. (1821). Thus a total of 26 un-necessary name changes would be required. Thus such a usurpation is un-acceptable.

PROVISIONS OF THE CODE

The Code requires first of all (App. I-4) that the choice of a lectotype should be undertaken only in the light of an understanding of the group concerned. It is then necessary to keep rigorously close to the Code and the facts. The Code has been recently revised (1952), and it is in order to quote the pertinent parts that should be rigorously applied. If rules are to be side-stepped on the basis of fantastic, unsupported hypotheses that can never be *definitely* proved, then

*) Uphof (1938; 1940; (1946) 1948), and Traub & Moldenke (1949). The opposing view (Sealy, 1939) is based in part on circumstantial "evidence"; the recent statements (Dyer, 1954) do not add anything new.

there is no object whatever in having any at all. It is logical that when there is any point at issue in science, the clearly apparent facts should be the deciding factor — what Linnaeus included in Species Plantarum, 1753, in this case. For ease of reference, the parts that apply primarily in this case are briefly indicated:

App. I-4a: "In choosing a lectotype any indication of intent by the author of a name should be given preference unless it is contrary to his description and remarks. Such indications are manuscript notes, annotations on herbarium sheets, recognizable figures and epithets such as *typicus, genuinus, vulgaris, communis,* etc." App. I-4b: "A lectotype must be chosen from among elements that were definitely studied by the author up to the time the taxon was published and included in it when it was published". Art. 19: "The choice of the lectotype or neotype is cancelled if the original material is rediscovered or if it can be shown that the choice was based on a mis-interpretation of the original description." Art. 21: "The nomenclatural type of a species is a single specimen or other element except one or more for small herbaceous plants and for non-vascular plants." Art. 21, note 2: "For a species without a type specimen, the type may be a description or a figure."

It should be noted first of all that the lectotype must be chosen from among the elements that were *definitely* studied by the author up to the time the taxon was published and included in it when it was published. This rules out all the irrelevant happenings after 1753 which have so beclouded the issue with a maze of irrelevant statements, unsupported suppositions and fantasy in the past.

THE ORIGINAL TYPE ELEMENT OF AMARYLLIS BELLADONNA L.

The record left by Linnaeus — the original material that he studied — in connection with the proposal of the species, *Amaryllis belladonna* L., is quite clear and consistent, and has been discussed in detail by Traub & Moldenke (1949, pp. 35-47), but must necessarily be briefly reviewed here. The record in Species Plantarum, 1753, is as follows:

"4. Amaryllis spatha multiflora, corollis campanulatis, aequalibus, genitalibus declinatis. Hort. Cliff. 135. Roy. lugdb. 36.

"Lilio Narcissus polyanthos, flore incarnato; fundo ex luteo albescente. Sloan. jam. 115. hist. I. p. 244. Seb. thes. I. p. 25. t. 17. f. 1.

"Lilium rubrum. Merian. surin. 22. t. 22.

"Habitat in Caribaeis, Barbados, Surinama."

Under these direct citations, there are supporting citations, and all of these together number 15 (the 11 major ones are: Hermann, 1689, 1698; Sloane 1696, 1707; Plukenet, 1698; Tournefort, 1700; Merian, 1705; Boerhaave, 1720; Seba, 1734; Linnaeus, 1737; and Royen, 1740). All of these citations refer to the American Belladonna, and *not a single one* to the Cape Belladonna. In a number of cases both the American Belladonna and the Cape plant are included in the cited text side by side, but Linnaeus selected and quoted only the references to the American Belladonna under the name, *Amaryllis belladonna* L. 1753. He did this consistently in 1737 and 1753. This is proof that Linnaeus up to 1753 did not include the Cape Belladonna in the taxon. This evidence is presented in detail by Traub & Moldenke (1949, pp. 33-47). These citations to the American Belladonna include two unmistakable detailed descriptions of the American Belladonna (Hermann, 1698, and Sloane, 1707), and in the latter description (Sloane, 1707), the peduncle is indicated as *hollow* as is the case in the American Belladonna whereas the Cape plant, *which is not mentioned,* has a *solid* peduncle. In addition Linnaeus' citations included *three* unmistakable illustrations of the American Belladonna, one a *colored* plate.

It is of interest to note in this connection that it has been shown by Traub & Moldenke (1949, pp. 26-35) that no less than 10 workers (Ferrari, 1633, Morison, 1680, Hermann, 1687, 1698, Plukenet, 1700, Tournefort, 1700, Rudbeck, 1701, Petiver, 1709, Barrelier, 1714, Boerhaave, 1720, and Wienmann, 1742) had reported on the Cape Belladonna up to 1742 — including 8 unmistakable illustrations of the Cape plant — BUT Linnaeus consistently did not select any of these either in 1737 or 1753. This is direct proof of Linnaeus' intent. Up to 1753 the Cape plant has no connection with the name, *Amaryllis belladonna* L., which proves that the American Belladonna is the original type element. The statement (Sealy, 1939) that Linnaeus mis-identified the literature citations with the description of the Cape plant cannot be proved as will be shown later.

The significant fact to note as showing intent is that Linnaeus used only citations to the American Belladonna in 1737 and 1753. Thus after having 16 years to reconsider the matter *he did not change his mind.* Under the Code this has to be accepted. On the other

hand, the unsupported statement (Sealy, 1939, p. 55) that "it is most likely that the synonyms cited by Linnaeus in 'Hortus Cliffortianus' represent 'book-work' hastily compiled owing to the great pressure under which that work was written" is pure fantasy as pointed out by Traub & Moldenke (1949, pp. 32-33) and can never be proved. If such rash statements were to be taken at face value, then there would be trouble ahead because the work of other workers would be unsafe from similar attacks. It is known that Linnaeus' mental equipment was of a high order, and he surely would have discovered any error he made in 1737 (Hort. Cliff.) 16 years later when he prepared Species Plantarum, ed. 1. 1753.

The reader should therefore be forewarned that other attempts made to ignore basic facts, particularly with reference to using a highly subjective evaluation of beauty (Sealy, 1939) to settle a major point in nomenclature are out of order because they cannot be proved. It should be realized that there is more than one kind of beauty as anyone can see who has viewed the outstandingly beautiful plate of the American Belladonna (Merian t. 22), and any plate of the Cape Belladonna which has modest kind of beauty that still is outstanding. Any subjective view in such a matter surely cannot settle the point at issue and can only lead to un-necessary friction in taxonomy.

SOURCE OF THE EPITHET "belladonna"

Linnaeus apparently did not take the epithet, *belladonna*, out of thin air or in allusion to the Cape Belladonna because he had ample precedent on the basis of priority to guide him. Hermann, 1687, 1698, had used the phrase "Lilium Americanum puniceo flora, Bella Donna dictum" — the American lilium with scarlet flowers called Belladonna. In his plate 194, which is the first published illustration of the American Belladonna, appears the notation "Lilium Bella Donna". Hermann's phrase, containing the epithet was carried on through in all of the principal direct and indirect citations to the American Belladonna up to Hort. Cliff. 1737, and through it into Species Plantarum, ed. 1. 1753. It is apparent that it was entirely logical for Linnaeus to choose the epithet, *belladonna*, for the American plant, particularly since it is a known fact this name pre-dated the use of a similar epithet by Barrelier (1714) by *a quarter of a century*. Barrelier (1714) apparently was aware of this fact because he makes certain to indicate that his Belladonnas are Italian — "Belladonna formos. Ital.", and "Belladonna Ital. vulgr.". Thus his plants are Italian Belladonnas (= Cape Belladonna). The reader will note that the workers, from 1689 to 1737, whose work was cited in Sp. Pl. 1753 all referred to the American Belladonna, and they were normal human beings and their color perceptions surely represent a good cross section, accepted the name "Beautiful Lady" for the American Belladonna. Any subjective later statement which assumes that there is only one *individual* standard of beauty does injustice to human intelligence. Any attempt to appropriate the name *belladonna* for a come-lately that was not even referred to in Sp. Pl. 1753, and thus to supersede the correct use under the Code, is entirely out of order.

FACTORS IN CHOOSING A LECTOTYPE

According to the Code, the lectotype has to be chosen from among the elements that Linnaeus *definitely*, not only possibly, or most likely, *but definitely* studied up to 1753, and that he included in the taxon when it was published in 1753. The selection is made on the basis of indication of intent, unless such intent is contrary to his description and remarks. Such indication of intent are (a) manuscript notes, (b) annotations on herbarium sheets, (c) recognizable figures, and (d) epithets such as *typicus, genuinus, vulgaris, communis*, etc. In addition the original phrase-name and remarks have to be considered.

(a) Manuscript notes lacking

Strictly speaking on the basis of the Code, no manuscript notes made up to 1753 by Linnaeus that bear on this case have been found. This settles the matter on this score. However, certain events that happened after 1753 have been dragged in although these are automatically ruled out by the Code. These events resulted mainly from the confusion caused by the three erroneous statements of Philip Miller (1760), that influenced Linnaeus somewhat in his presentation in Sp. Pl. ed. 2. 1762. Such irrelevant statements and changes in viewpoint are not applicable because the elements must have been included in the taxon *up to the time* that it was published.

Alm's Amaryllis 98. dubia, 1775. Much has been made of this event that took place 22 years after 1753. New light has recently

been shed on the biologic status of this plant. This shows that the attempt (Sealy, 1939) to consider the thesis of Alm (1775) in connection with the typication of *Amaryllis belladonna* L. 1753, to show Linnaeus' intent is untenable at least on two grounds, — (a) the event occurred in 1775, and not up to 1753, and (b) Alm's plant, "#98. dubia. Mer. t. 22. Corollis basi laciniarum barbata" (bearded at the base of the tepalsegs) represents a distinct taxon. The flowers are creamy-white, there is a conspicuous paraperigone of bristles at the base of the tepalsegs, and the plant is summer-flowering. In contrast, the typical *Amaryllis belladonna* L. (= the American Belladonna) is scarlet-flowering, with an obscure paraperigone of bristles, and it is spring-flowering (about three months earlier). There are lesser differences and Alm's plant can be readily distinguished from the typical American Belladonna *). Herbert (1837) raised Alm's plant to specific rank under the epithet *barbatum*, and it is now apparent that on biologic grounds, Herbert (1837) was right in recognizing Alm's plant as a distinct taxon. The plant is effectively isolated reproductively from the American Belladonna so that crossing cannot normally take place in nature. Herbert proposed the taxon on morphological grounds — prominent paraperigone and white flowers, which may be used for ease in distinguishing the two taxons.

Thus Linnaeus, *if he advised his pupil* Alm to question its relationship to the American Belladonna as represented by Merian t. 22, was essentially right. It is not known if he considered the seasonal difference in flowering habit, but it is certain that he was struck by the prominent paraperigone of bristles. His keen insight, once he saw this feature, apparently led him to suspect that he was dealing with a plant that could not be referred *for certain* to the plant represented by the Merian plate (t. 22), and thus the appearance of the question mark (*dubia*) was logical, and shows no intent about his American Belladonna in 1753. Therefore, the statement (Sealy, 1939) about the intent shown by Linnaeus' pupil in 1775, long after 1753, is untenable, and this much of the maze can be permanently removed.

Linnaeus' emendation, 1762. Philip Miller (1760) pictured the Cape Belladonna (plate 23, err. no. 24), but he was utterly confused about its relationship to plants included in the pertinent literature as pointed out in detail by Traub & Moldenke (1949, pp. 48-49). Miller (1760) does not mention Species Plantarum 1753, but quotes the phrase, "Amaryllis spatha multiflora...." from Hort. Cliff. (1737), and concludes *erroneously* (a) that Sloane's plant (Cat. jam. 115), which is known to have a *hollow* peduncle by Sloane's description, and represents the American Belladonna, *is the Cape plant*, which is known to have a *solid* peduncle; (b) that Tournefort (1700) was wrong in considering Sloane's plant the same as Hermann's figure (Parad. Bat. pl. 194), and (c) that Hermann's plate 194 is conspecific with what is now known as *Amaryllis reginae* L. (1762) — Miller's plate 24 (err. no. 23). On the basis of the detailed evidence presented by Traub & Moldenke (1949, pp. 35-47), it can be *definitely* stated that Miller is wrong on all three counts: (a) Sloane's plant, with the *hollow* peduncle *is* the American Belladonna, and not the Cape plant with a *solid* peduncle (a wide gap between the two); (b) Tournefort *was* correct in considering Hermann's plant (plate 194) as conspecific with Sloane's plant as shown by the detailed descriptions by Hermann (1698) and Sloane (1707), and (c) Hermann's plant (plate 194) *is* definitely not the plant that is now known as *Amaryllis reginae* L.

Unfortunately, Miller's confusing statements in 1760 influenced Linnaeus somewhat and others after him. In ed. 2. Sp. Pl. 1762, Linnaeus proposed the species *Amaryllis reginae* L.; following Miller (1760) he quoted Hermann's plate 194 as a synonym, but he still retained it also under *Amaryllis belladonna* L. Thus he did it on the authority of Miller (1760) and not as a well reasoned out act. Following Miller (1760) he added the Cape Belladonna on the basis of Miller's plate 23 (err. no. 24) representing a plant with a *solid* peduncle as a secondary discordant element to the *original* type element representing the American Belladonna with a *hollow* peduncle that was retained, and according to the Code cannot ever be removed. The statement (Sealy, 1939) that Linnaeus by quoting Miller's plate 23 (err. no. 24) and emending the

*) This plant has been recently re-collected (see Plant Life 10: 65-67, fig. 8. 1953). The writer has grown this outstandingly beautiful plant side by side with the typical *Amaryllis belladonna* L., and has verified the facts indicated in this paper which entitle the former to specific rank — *Amaryllis barbata* (Herb.) Traub, *comb. nov.* (syn. — *Hippeastrum barbatum* Herb., Amaryll. 128, pl. 21, fig. 1. 1837.)

phrase-name did accept the Cape Belladonna, sometime between 1753 and 1762, as the type of the name, *Amaryllis belladonna* L., simply is not true because Linnaeus retained the original references that apply to the original type element, the American Belladonna. Thus the Cape plant was added as a discordant secondary element (see Stapf, 1929) due to the confusion brought into the matter by the erroneous statements of Miller (1760).

Linnaeus (1762) correctly emended the phrase-name under *Amaryllis belladonna* L., to include the "recurved" apex *(unque reflexis)* of the outer tepalsegs (= "recurved" pappilose cohering keels). The statement (Sealy, 1939) that this "is characteristic of the Cape Belladonna, but does not occur, so far as I am aware" in the American Belladonna, is an uninspired guess, and is only half right. It is known to specialists in the *Amaryllidaceae* that cohering keels, usually "recurved" pappilose cohering keels (see Hume, 1936) are widespread in this Family, and are found at least in some other plant families. In the typical structure there is a tiny pappilose elevation on the inner tip of each outer tepalseg, a development of the central rib, and on each side of it there is a tiny depression formed in part by the side of the elevation and in part by a slight infolding of the margin of the tepalseg (Hume, 1936). The elevation may be pointed at the end opposite to the tip of the tepalseg, and thus give the appearance of a "reflexed" outer tepalseg. The reader should note that in the drawings (Sealy, 1939), dating from John Miller (1770), the cohering keels of the Cape plant are somewhat exaggerated, and this condition is contrasted with a drawing from Merian (1705) in which these structures are not shown. Such „evidence" is hardly comparable. In the earlier comparable illustrations of the Cape plant, these structures were also absent.

In the Cape Belladonna *(Brunsvigia rosea* (Lamarck) Hann.), the pappilose point of the elevation is strongly "reflexed", and in the American Belladonna, *Amaryllis belladonna* L., the „reflexed" pappilose point is short. The presence of the "reflexed" cohering keels in the American Belladonna has been verified from living material flowering in March 1954. A detailed report on this subject will appear later. Thus from a morphological point of view, both the American and Cape Belladonnas belong to the class with "reflexed" cohering keels of the outer tepalsegs. Apparently, Linnaeus (1762) had examined these structures sometime previously in the American Belladonna, the original type element (1753), and then added the secondary element, another Belladonna, the Cape plant, also with "reflexed" cohering keels, in 1762 due to the confusion caused by the erroneous statements of Miller 1760. Thus the statement (Sealy, 1939) that the latter act "shows conclusively that Linnaeus *did* accept the Cape plant as his *Amaryllis belladonna* some time between 1753 and 1762" *is simply not true.* This unfounded claim together with the statement about the outstanding beauty of the flowers (Linnaeus, 1737) can never by the wildest stretch of the imagination constitute proof that the Cape plant was considered as the original type of *Amaryllis belladonna* L .

Thus, the fact that Linnaeus (1762) added the Cape plant as a discordant secondary element under *Amaryllis belladonna* L., does not prove that the original type element, which was retained by Linnaeus, was replaced, or could be ever replaceable under the Code. Stapf (1929) has ably expressed the relationship of the two elements, — "It is true, in the second edition of the Species Plantarum Linnaeus refers to Miller, Fig. Beautif. t. 23 (erroneously numbered t. 24 by Miller), but he quotes it merely as an illustration of the West Indian Belladonna of the first edition." — that is another Belladonna about which Linnaeus erred because of the confusion introduced by Miller (1760), and this discordant element was later removed by Lamarck (1783) when he proposed the first valid name under the Code for the Cape Belladonna, *Amaryllis rosea* Lamarck (1783).

It has been shown that the claim (Sealy, 1939) that Linnaeus accepted the Cape plant as the type of *Amaryllis belladonna L.,* is untrue since it could not replace the original type element that was retained in the 2nd ed. of Sp. Pl. 1762. Since the claim (Sealy, 1939) is not true, it is not possible to use it as the basis of a fantastic Piltdown Man concept — that Linnaeus accepted the Cape plant as the type of *Amaryllis belladonna* L., some time between 1753 and 1762 (untrue) and that this taken in conjunction with the reference to outstanding beauty of the flowers seems to justify the conclusion that the species was based on the Cape plant. This Piltdown Man concept is wholly unfounded because its bases are untenable to say the least. As indicated earlier, in order to lessen the shock to the reader, the concept (Sealy, 1939) that the statement in Hort. Cliff. 1737, to the effect

that "The flowers of this genus are very beautiful — I do not know that the second species has an equal — hence many are called Belladonna" excludes the American Belladonna is utterly fantastic. It should be noted that facts have been superseded by unproved assumptions. The Cape plant was not even mentioned in Hort. Cliff. 1737 and Species Plantarum 1753. This is a wholly prejudiced statement that is untrue and surely has no validity in science. As already indicated, any prejudiced later statement that assumes that there is only one *individual* standard of beauty cannot be successfully defended. Any attempt to appropriate the epithet *belladonna* for a come-lately that was not even referred to in Sp. Pl. 1753, and thus to supersede the correct use under the Code, is entirely out of order to say the least. Hermann (1698) had referred to the American Belladonna as "elegantly beautiful". Linnaeus in 1737 and 1753 surely studied the beautiful colored plate of Merian (t. 22). Thus Linnaeus knew exactly how the plant appeared. It is true that Linnaeus "knew a living plant of the species", *Amaryllis belladonna* L. The American Belladonna had been figured three times before 1737 — Hermann (1698), Merian (1705), *colored plate,* and Seba (1634), and all three were cited under that species in Hort. Cliff. 1737. It should be noted that the Seba (1734) plate appeared only three years before Hort. Cliff. (1737) was published. That Linnaeus could confuse the colored plate of Merian (t. 22) of the American Belladonna with any other plant in the Clifford garden is *utterly absurd,* one is "elegantly beautiful" as stated by Hermann as early as 1698, and the other is modestly beautiful. *The very difference between these plants precludes any possibility that Linnaeus could have been mistaken.* This, on top of the fact that he had before him numerous references to the Cape plant, some with illustrations, that he could have selected *and did not,* proves as conclusively as it ever can be proved that the plant in the Clifford garden in 1737 was the American Belladonna. When after the lapse of 16 years, he again used these same references to the American Belladonna in Sp. Pl. 1753, and none to the Cape plant, he definitely *indicated* what the type element of the epithet *belladonna is,* and thus will remain under the Code.

Trew Seligmann (about 1766) and so on. By now it should be realized that this sort of circumstantial "evidence" is wholly beside the point. Yet the statement is made (Sealy, 1939) that Trew Seligmann (about 1766) published the epithet *belladonna* under a generic name, Lilio-narcissus which was given in synonymy under *Amaryllis* L. (Linnaeus, Genera Plantarum, ed. 5. 1754). According to the Code for reasons all taxonomists know, this does not affect the case. Besides, Seligmann is not Linnaeus, and he did this 13 years after 1753. Such "evidence" is entirely out of order. Similarly, the younger Linnaeus *is not* Linnaeus senior. What the younger Linnaeus wrote years later in a manuscript (about 1781—83) has nothing to do with the case. It should be remembered that there is a Code. Similarly, the references to L'Héritier (1788) have no bearing on the case.

The allegations (Sealy, 1939) that the American Belladonna was less well-known in cultivation than the Cape plant, and that the Royen (1740) reference under *Amaryllis belladonna* L. (1753) represented the Cape plant are guess work and cannot be substantiated with facts as shown by Traub & Moldenke (1949, pp. 44; 47-48; 28-29).

(b) Annotated herbarium sheet lacking

The recommendation (App. I-4c) about preferential treatment for specimens does not apply in this case because no annotated herbarium sheet has been found that could function as a lectotype. Under the Code, this automatically eliminates any evidence on this basis. Yet, it is stated (Sealy, 1939) that there is now in the Clifford Herbarium in the British Museum a specimen that "bears no name or identification which is recognizable as the Cape Belladonna". And it should be asked, "and so what?". Linnaeus was connected with the Clifford Herbarium for only two years, 1735—37, and its history "before its acquisition by Banks (in 1791) is somewhat obscure" (Jour. Bot. Lond. 62: 184. 1924). The specimen obviously could have been placed there after 1737, particularly since it "bears no name or identification", and was therefore not annotated by Linnaeus while he was preparing Hort. Cliff. in 1735—37. The Code specifies "annotated herbarium sheets", and any impartial jury has to rule out such unsupported evidence for obvious reasons (complete silence), and for the protection of conscientious workers, and also as being contrary to the Code (App. I-a) which requires that only annotated sheets may be considered. It is hoped that nothing further will be heard from this completely silent source because this un-annotated specimen can never function as a lectotype.

(c) Only-recognizable figures of the American Belladonna are cited

The evidence showing that no figures at all of the Cape plant, but *three* recognizable figures, *one a colored plate,* of the American Belladonna were cited by Linnaeus under *Amaryllis belladonna* L. 1753 has already been mentioned in connection with the consideration of the original type element of this plant and need not be repeated here except to say that Linnaeus *could not possibly* have confused the Merian (1705) figure (t. 22) with any plant even remotely resembling the Cape Belladonna. The American Belladonna is represented as an outstandingly beautiful scarlet flowering plant whereas the Cape plant is light pink. Linnaeus surely was not so color blind that he could confuse these two colors! There were at least 8 illustrations of the Cape plant available up to 1742, but Linnaeus omitted them in 1737 (Hort. Cliff.) and in Sp. Pl. 1753 under *Amaryllis belladonna* L. This surely shows Linnaeus' intention in a dramatic manner. The statement (Sealy, 1939) that Linnaeus made a mistake in 1737 because of "book work" and misapplied the citations is sheer balderdash and cannot be substantiated in the face of the clear records. Linnaeus was *silent* about the Cape plant up to 1753 and this is decisive.

(d) Epithets such as typicus, genuinus, etc., lacking

The epithet used by Linnaeus in connection with *Amaryllis belladonna* L., does not come in the class indicated under the Code (App. 1-4a) such as *typicus,* etc. He cited a colored illustration of the American Belladonna under the phrase name in 1737, and the epithet *belladonna* in 1753, and thus if the statement about the outstanding beauty of the plant in 1737 means anything it refers only to the American Belladonna. Unfortunately, it has been stated (Sealy, 1939) that the Cape plant is outstandingly beautiful and the American Belladonna is not. The second part of this statement cannot be proved because it is untrue—both plants have outstandingly beautiful flowers. There are two kinds of beauty involved. One is beautiful in a modest way, and the other is "elegantly" beautiful as pointed out by Hermann as early as 1698. The statement (Sealy, 1939) would not allow for such difference of opinion in aesthetic matters. It is clear that such an appeal to aesthetic prejudices has no validity in science as pointed out earlier in this paper and cannot be used in deciding a major point in taxonomy.

THE ORIGINAL PHRASE-NAME AND REMARKS

It has been shown conclusively that the Cape Belladonna cannot be read into Species Plantarum, 1753 on the basis of manuscript notes (lacking), annotated herbarium specimens (lacking), recognizable figures (lacking for the Cape plant, but including three, one a colored plate, of the American Belladonna), or intent as shown by epithets such as *typicus,* etc. This is true because the "evidence" or rather lack of evidence in favor of the Cape plant — complete silence — makes this entirely clear.

According to the Code, the "intent by the author of the name should be given preference unless it is contrary to his description and remarks. Linnaeus' remarks (Hort. Cliff. 1737) about the beauty of the group of species has been considered in connection with possible intent as shown by the choice of the epithet, and need not be considered further. This leaves only the "phrase name", "Amaryllis spatha multiflora, corollis campanulatis aequalibus, genitalibus declinatis", which appears under the name *Amaryllis belladonna* L. 1753.

The attempt has been made (Sealy, 1939) to use two words in the phrase name, "multiflora" and "campanulatis" as an entering wedge to make something out of nothing. — that is to read into Species Plantarum 1753 a species that was obviously omitted by Linnaeus. It is not explained why this species — which has a valid name of its own under the Code, *Amaryllis rosea* Lamarck, 1783 — *must* be included there. Surely, Linnaeus omitted other deserving species and it is thus in good company and this should not be held against any of them.

It is alledged (Sealy, 1939) that the phrase name already quoted fits the Cape plant better than the American Belladonna. In coming to such a conclusion, as pointed out by Traub & Moldenke (1949, pp. 44-47), the present day usage of the words have been extrapolated way back to 1753, which is contrary to all reason because it is definitely known that these words "multiflora" and "campanulatis" were not used by Linnaeus in the exact sense as they are today. Any research worker in this field knows this. There is conclusive evidence that the phrase name quoted does not fit the Cape plant any better than it fits the American Belladonna. It is plain that if such spurious reasons should be acceptable for switching names of Linnean species, there would be a resulting endless

chaos and the work of all conscientious workers would be subject to constant sabotaging. The evidence has been given in detail by Traub & Moldenke (1949, pp. 35-56), and in the present paper necessarily only a summary can be given.

"Spatha multiflora". It has been definitely shown (Traub & Moldenke, 1949, pp. 44-46) that Linnaeus in Sweden used the phrase "spatha multiflora" as meaning "more than 1-flowered" and "more than 2-flowered" by implication. In addition, his contemporaries, Dr John Hill, in England, and Lamarck, in France, used it in a similar manner as shown in detail by Traub & Moldenke (1949). It was stated (Sealy, 1939) that the Cape plant is 10-12-flowered, but this is not true since the species is 5-12-flowered. It is also a known fact that the American Belladonna is 2-4-flowered. Any attempt to claim (a) that many-flowered (spatha multiflora) begins with the 5-flowered and not with the 4-flowered umbel is untenable, and that (b) the phrase points in any way to the Cape plant rather than the American Belladonna is utterly fanciful.

"Corollis campanulatis". It has also been shown in detail by Traub & Moldenke (1949, pp. 44-46) that Linnaeus used the phrase "corollis campanulatis" more loosely than it is used today. The statement (Sealy, 1939) that the phrase fits the Cape plant better than the American Belladonna is pure fanciful nonsense. Both plants have zygomorphic flowers and therefore cannot be truly bell-shaped.

One has only to look a little lower on the same page (no. 293) of Sp. Pl. 1753 to realize that the statement (Sealy, 1939) is untenable. Under species no. 7, *Amaryllis longifolia* L., appears the phrase name, "Spatha multiflora, corollis campanulatis aequalibus, scapo compresso longitudine umbellae". Milne-Redhead and Schweickerdt (1939) have shown in a thorough monograph that this is *Cybistetes longifolia* (L.) M-R & Schwkt so that there can be no question as to the identity of this plant. The illustration cited by Linnaeus, Hermann, Parad. plate 195 (1698) shows a plant in which the flowers are zygomorphic (irregular). The authors cited verified this fact and they separate it on that basis from *Ammocharis* which has actinomorphic (regular) flowers, Since no zygomorphic flowers can be truly bell-shaped Linnaeus used the word "campanulatis" in the same manner as he did under species no. 4, *Amaryllis belladonna* L. This shows that Linnaeus used the word "campanulatis" in a broad sense to include "lilium-like" flowers, that is, the perigone with six sub-equal (zygomorphic) tepalsegs in the cases cited as pointed out by Traub & Moldenke (1949, pp. 44-46). If one wanted to indulge in fantasy and suppositions, one could make out a better case for the American Belladonna on the basis of the phrase, "campanulatis" because the Cape plant has a funnel-shaped flower (almost trumpet-shaped) whereas the American Belladonna has a broadly funnel-shaped flower, and the tepalsegs are bent somewhat outward and thus resemble a bell more nearly than in the case of the Cape plant. But such suppositions are out of order on two grounds — Linnaeus did not apply this phrase strictly as we to today, and he gave no less than three illustrations of what he meant by this phrase — three illustrations of the American Belladonna. In addition he used it similarly in other instances. Thus the statement (Sealy, 1939) is untenable.

THE LECTOTYPE OF AMARYLLIS BELLADONNA L.

According to the Code, the "lectotype must be chosen from among elements that were definitely studied by the author up to the time the taxon was published and included in it when it was published" (App. I. 1-4a). Since no holotype was designated, and no annotated specimen has been found applicable to this case, the lectotype must be chosen from (a) the descriptions included (made by him, or quoted by him in 1753), or (b) figures that Linnaeus cited in 1753 (see Art. 21 of Code).

Linnaeus used a phrase-name which was never meant to be an adequate description but was to serve in the same manner as one of the divisions in a key. It is thus hardly possible to recognize this phrase-name as a lectotype since it is not detailed enough. This leads directly to the citations, under which there are two detailed unmistakable descriptions of the American Belladonna, Hermann, 1798, and Sloane, 1707. In the latter case even the generic detail is given, a *hollow* peduncle that separates it from plants like the Cape plant which have a *solid* peduncle. Either of these two descriptions could serve as a lectotype under the Code.

There are also three unmistakable figures, Hermann (1798), Merian (1705), a colored plate, and Seba (1734). Anyone of these could serve as a lectotype under the Code.

After considering the possibilities indicated, Traub & Moldenke, (1949, p. 38) designated the plate 194 of Hermann, 1798, the first illustration of this species, as the lectotype. The matter was considered further by Traub (1954) and he confirmed this same choice. This choice complies with the Code since it is one of the elements that was definitely studied by the author up to the time the taxon was published and included in it when it was published in 1753.

SUMMARY

It has been shown that under the International Code, the original type element of the name, *Amaryllis belladonna* L. (1753) is the American Belladonna: (1) the 15 direct and indirect literature citations that support the phrase-name under it, including two detailed descriptions, one mentioning the detail of a *hollow* peduncle that separates it from the Cape Belladonna; and three unmistakable figures, one a colored plate, constitute the elements that Linnaeus *definitely* studied up to the time the taxon was published and included in it when published in 1753; (2) no manuscript notes or annotated herbarium specimens have been found that have any bearing on this case; (3) the epithet, *belladonna* is not in the class of *typicus, genuinus,* etc., and cannot be used to read the Cape Belladonna into Species Plantarum 1753, because Linnaeus had before him the colored plate of Merian, 1705, t. 22, of the American Belladonna, which unmistakably could be matched with the plant that was growing in the Clifford garden in 1735-37; (4) the phrase-name used by Linnaeus does not fit the Cape plant better than the American Belladonna because the terms, "multiflora" and "campanulatis" as used by Linnaeus and the contemporaries cited in England and France, include the American Belladonna; (5) under the Code, the Cape Belladonna, *Brunsvigia rosea* (Lamarck) Hann. (syn.-*Amaryllis rosea* Lamarck, 1783) was added by Linnaeus in 1762 to the original type element of *Amaryllis belladonna* L. 1753, as a discordant element and remained there until Lamarck in 1783 proposed the first valid name for the species as indicated under synonymy in the first part of this sentence; (6) the lectotype chosen, which had to be selected from among the elements that Linnaeus had *definitely* studied and included in the species up to 1753, is plate 194, Hermann, 1798; and (7) the typification of the genus *Amaryllis* L., will be reviewed in another article prepared for Taxon.

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NOTE. For citations to the pre-Linnean literature and other citations up to 1788, see Traub & Moldenke (1949, pp. 28-29; 47-53).

Nomenclature committees

Special Committee for Pteridophyta and Phanerogamae

Subcommittee for Phanerogamae

Secretary: Prof. Dr R. E. G. Pichi-Sermolli, Herbarium Universitatis Florentinae, Istituto Botanico. Via Lamarmora 4, *Firenze,* Italia.

The Secretary has circulated among the Members of the Subcommittee the first part of the reports on the generic names proposed for conservation. After having received Members' comments and circulated them, the Subcommittee proceeded to the voting on the proposals for conservation, which gave the following results:

NOMINA CONSERVANDA PROPOSITA	NOMINA REJICIENDA PROPOSITA
23 — **Cedrus** Trew, Cedr. Lib. Hist. 6. 2 pl. 1757. T.: *C. libani* A. Rich.	*Cedrus* Duham. Arbres & Arbrust. **1**: XXVIII. 139. pl. 52. 1755. T.: *Juniperus phoenicea* L.

Votes: In favour of conservation **10**; Against (conservation unnecessary) **1**; Abstention **0**.

166 p. — **Digitaria** Hall. (1768) Scop. (1772). T.: *D. sanguinalis* (L.) Scop.	*Digitaria* Adans. (1763). T.: *Syntherisma* Walter (1788). T.:

Votes: In favour of conservation **1**; Against conservation **3**; Against (conservation unnecessary) **7**; Abstention **0**.

273 — **Avenastrum** Jess. Deutschl. Gräser. 214-218. 1863, emend. Beck, Fl. Nieder.-Oest. **1**: 72. 1890. T.: *A. Parlatorei* (Woods) Beck.	*Helictotrichon* Besser ex Schultes in Roemer & Schultes, Syst. Veget. Add. 1 ad Mantissa **3**: 526. 1827. T.: *H. Parlatorei* (Woods) Pilger *Heuffelia* Schur, Enum. Pl. Transs. 760. 1866.

Votes: In favour of conservation **0**; Against conservation **11**; Abstention **0**.

400 — **Monerma** Beauv. Ess. Agrost. 116. 1812. T.: *M. monandra* (L.) Beauv.	*Lepturus* R. Br. Prodr. Fl. Nov. Holl. 207. 1810. T.: *L. repens* (Forst.) R. Br.

Votes: In favour of conservation **1**; Against conservation **10**; Abstention **0**.

402 — **Lepturus** Trin. Fund. Agr. 122-123. 1820. T.: *L. incurvus* (L.) Druce.	*Lepturus* R. Br. Prodr. Fl. Nov. Holl. 207. 1810. T.: *L. repens* (Forst.) R. Br. *Lepidurus* Janchen, Oest. Bot. Zeitschr. **93**: 85. 1944. T.: *L. incurvus* (L.) Janchen.

Votes: In favour of conservation **1**; Against conservation **10**; Abstention **0**.

469 — **Heleocharis** R. Br. corr. Lestib. Ess. Fam. Cypér. 41. 1819.	*Eleocharis* R. Br. Prodr. Fl. Nov. Holl. 224. 1810.

Votes: In favour of conservation **0**; Against conservation **11**; Abstention **0**.

492 — **Rhynchospora** Vahl. Enum. **2** (2): n. 113 et 229. 1806. corr. Willd. Enum. pl. Hort. Berol. 71. 1809. T.: *R. alba* (L.) Vahl.	*Dichromena* Michx. Fl. bor.-amer. **1**: 37. 1803. T.: *D. leucocephala* Michx.

Votes: In favour of conservation **7**; Against conservation **1**; Against (conservation unnecessary) **3**; Abstention **0**.

542 — **Pritchardia** Seem. & Wendl. ex Wendl. Bonplandia **10**: 197. 1862.
T.: *P. pacifica* Seem. & Wendl. ex. Wendl.

Pritchardia Unger ex Endl. Gen. Pl. Suppl. **2**: 102. 1842.
T.: *P. insignis* Unger.
Pritchardioxylon Drude in Engl. & Prantl. Nat. Pflanzenfam. Nachtr. 50. 1897.
Eupritchardia Kuntze, Rev. Gen. **3** (2): 323. 1898.
T.: *E. pacifica* (Seem. & Wendl.) Ktze.

Votes: In favour of conservation **9**; Against conservation **2**; Abstention **0**.

672 — **Nipa** Thunb. Vet. Akad. Nya Handl. Stockholm **3**: 231. 1782.
T.: *N. fruticans* Thunb.

Nypa von Wurmb, Verh. Bat. Gen. K. & W. **1**: 349. 1779.
T.: *N. fruticans* von Wurmb.

Votes: In favour of conservation **1**; Against conservation **10**; Abstention **0**.

747 — **Peltandra** Raf. Journ. Phys. Chim. Hist. Nat. & Arts **89**: 103. 1819.
T.: *P. undulata* Raf.

Houttinia Necker, Elem. Bot. **3**: 291. 1790.
T.: No binomial has been established.

Votes: In favour of conservation **9**; Against conservation **1**; Against (conservation unnecessary) **1**; Abstention **0**.

1086 — **Endymion** Dum. Fl. Belg. 140. 1827.
T.: *E. nutans* (Sm.) Dum. [*E. non-scriptus* (L.) Garcke].

Hyacinthoides Heist. ex Fabr. Enum. ed. 1. 2. 1759.
T.: *Hyacinthus non-scriptus* L.
Usteria Medic. Act. Acad. Theod. Palat. Pars Phys. **6**: 480. 1790. non Willd. 1790.
T.: *U. hyacinthiflora* Medic.

Votes: In favour of conservation **5**; Against conservation **5**; Abstention **1**.

1552 — **Malaxis** Swartz partim, Lindley, Gen. & Spec. Orch. Pl. 23. 1830.
T.: *M. paludosa* (L.) Sw.

Malaxis Solander ex Swartz, Nov. Gen. & Sp. Pl. seu Prodr. 119. 1788.
T.: *M. spicata* Sw.
Hammarbya O. Kuntze, Rev. Gen. Pl. **2**: 665. 1891.
T.: *H. paludosa* (L.) O. Kuntze.

Votes: In favour of conservation **1**; Against conservation **9**; Abstention **1**.

1857 — **Houttuynia** Thunb. Fl. Jap. 12. 1784.
T.: *H. cordata* Thunb.

Houttuynia Houtt. Nat. Hist. II. **12**: 448. pl. 85. f. 3. 1780.
T.: *H. capensis* Houtt.
Polypara Lour. Fl. Cochinch. 61. 1790.
T.: *P. cordata* (Thunb.) O. Kuntze.

Votes: In favour of conservation **7**; Against conservation **4**; Abstention **0**.

1877 — **Platycarya** Sieb. & Zucc. Abb. Akad. München III. **2**: 741. 1843.

Petrophiloides Bowerbank. Fossil Fruits London Clay. 44. 1840.

Votes: In favour of conservation **2**; Against conservation **3**; Against (conservation unnecessary) **6**; Abstention **0**.

1891 p. — **Castanopsis** (D. Don) Spach, Hist. Vég. Phaner. **11**: 185. 1842.
T.: *C. armata* (Roxb.) Spach.

Balanoplis Raf. Alsogr. Am. 29. 1838.
T.: *B. tribuloides* (Sm.) Raf.

Votes: In favour of conservation **11**; Against conservation **0**; Abstention **0**.

1892 — **Pasania** Oerst. Kjoebenh. Vidensk. Meddel. **18**: 81. 1866.
T.:

Balanaulax Raf. Alsogr. Am. 28. 1838.
T.:
Arcaula Raf. Alsogr. Am. 30. 1838.
T.:

Votes: In favour of conservation **1**; Against conservation **10**; Abstention **0**.

1893 — **Cyclobalanopsis** Oerst. Kjoebenh. Vidensk. Meddel. **18**: 77. 1866.
T.: *Quercus gomeziana* A. Camus.

Perytis Raf. Alsogr. Am. 29. 1838.
T.: *P. lamellosa* Raf.

Votes: In favour of conservation **7**; Against conservation **3**; Abstention **1**.

1946 — **Artocarpus** J. R. & G. Forst. Char. Gen. 101. 1776.
T.: *A. communis* J. R. & G. Forst.

Sitodium [? Banks in] Parkinson Journ. Voy. Endeavour 45. 1773.
T.: *S. altile* [? Banks in] Parkinson.

Votes: In favour of conservation **11**; Against conservation **0**; Abstention **0**.

2045 — **Grevillea** R. Br. ex Salisb. in Knight, Proteae 120. 1809. corr. R. Br. Trans. Linn. Soc. **10**: 167. 1810.
T.: *G. asplenifolia* Salisb.

Grevillia R. Br. ex Salisb. in Knight, Proteae 120. 1809.
Stylurus Salisb. in Knight, Proteae 115. 1809.
Lysanthe Salisb. in Knight, Proteae 116. 1809.

Votes: In favour of conservation **8**; Against conservation **3**; Abstention **0**.

2209 — **Coccoloba** P. Br. ex L. Syst. Nat. ed. 10. 1007, 1367. 1759.
T.: *C. uvifera* (L.) L.

Guaiabara Mill. Gard. Dict. Abr. ed. 4. **2**: 1754.
T.: *G. uvifera* (L.) House.
Coccolobis P. Br. Civ. Nat. Hist. Jamaica 209. pl. 14 f. 3. 1756.
T.: *Coccoloba uvifera* (L.) L.

Votes: In favour of conservation **11**; Against conservation **0**; Abstention **0**.

2299 — **Amarantus** L. Syst. Nat. ed. 10. **2**: 1268. 1759.

Amaranthus L. Sp. Pl. **2**: 989. 1753. Gen. Pl. ed. 5. 427. 1754.

Votes: In favour of conservation **0**; Against conservation **11**; Abstention **0**.

2429 p. — **Malachium** Fries (1828).

Myosoton Moench (1794).
Malachia Fries (1817).

Votes: In favour of conservation **0**; Against conservation **11**; Abstention **0**.

2494 — **Melandryum** Roehl. corr. Rchb. Handbuch 298. 1837.
T.: *M. pratense* Roehl.

Melandrium Roehl. Deutsch. Flora ed. 2. 37. 274. 1812.
T.: *M. pratense* Roehl.
Physocarpon Necker, Elem. **2**: 164. 1790.
T.: *P. vespertinum* (Sibth.) Raf.

Votes: In favour of the conservation of *Melandrium* (in its original spelling) **5**; In favour of the conservation of *Melandryum* (in its corrected spelling) **1**; Against conservation **4**; Against (conservation unnecessary) **1**; Abstention **0**.

2656 — **Schisandra** Michx. Fl. Bor. Amer. **2**: 218. March 1803.
T.: *S. coccinea* Michx.

Stellandria Brickell, Med. Repos. New York **6** (3): 327. End. Feb. or early March 1803.
T.: *S. glabra* Brickell.

Votes: In favour of conservation **10**; Against conservation **1**; Abstention **0**.

2727 — **Oxymitra** (Blume) Hook. & Thomson, Fl. Ind. **1**: 145. 1855.
T.: *O. cuneiformis* (Bl.) Hook. & Thoms.

Oxymitra Bishoff apud Lindenb. Acad. Caes. Leop. Nat. Cur. Nov. Acta **14**. Suppl. 1: 124. 1829.
T.: *O. paleacea* Bisch. apud Lindenb.

Votes: In favour of conservation **3**; Against conservation **7**; Abstention **1**.

2797 — **Neolitsea** (Benth.) Merrill, Philip. Journ. Sci. **1**: Suppl. 56. 1906.
T.: *N. zeylanica* (Nees) Merrill.

Bryantea Raf. Sylva Tell. 165. 1838.
T.: *B. dealbata* (R. Br.) Raf.

Votes: In favour of conservation **10**; Against conservation **1**; Abstention **0**.

2956 — **Rapistrum** Crantz, Class. Crucif. 105. 1769.
T.: *R. hispanicum* (L.) Crantz.

Rapistrum Haller. Hist. **1**: 224. 1768.
T.: *R. paniculatum* (L.) Gaert.
Schrankia Medikus, Pflanzengatt. **1**: 42. 1792, non Scop. ex J. F. Gmel. (1790).
T.: *S. rugosa* (L.) Medikus.

Votes: In favour of conservation **10**; Against conservation **1**; Abstention **0**.

2988 — **Neslia** Desv. Journ. de Bot. **3**: 162. 1814.
T.: *N. paniculata* (L.) Desv.

Rapistrum Haller, Hist. **1**: 224. 1768.
T.: *R. paniculatum* (L.) Gaert.
Sphaerocarpus Heister ex Fabricius, Enum. Pl. Helmst. ed. 2. 284. 1763. non Adans. 1763.
T.:
Vogelia Medikus, Pflanzengatt. 32. 1792. non J. F. Gmel. 1791. non Lam. 1792.
T.: *V. sagittata* Medikus [*V. paniculata* (L.) Hornem.].

Votes: In favour of conservation **8**; Against conservation **1**; Against (conservation unnecessary) **2**; Abstention **0**.

3019 — **Vesicaria** Lam. in Lam. DC. Fl. Franc. ed. 3. **4** (2): 696. 1805.
T.: *Vesicaria utriculata* (L.) DC.

Alyssoides Mill. Gard. Dict. Abr. ed. 4. 1754.
T.: *Alyssum utriculatum* L.
Vesicaria Adans. Fam. **2**: 420. 1763.
T.: *Alyssum vesicaria* L.

Votes: In favour of conservation **1**; Against conservation **10**; Abstention **0**.

3131 — **Darlingtonia** Torr. Smithson. Contr. Knowl. **6** (5): 4. 1853.
T.: *D. californica* Torr.

Darlingtonia DC. Ann. Sci. Nat. **4**: 97. 1824.
T.: *D. brachyloba* (Willd.) DC.
Darlingtonia Torr. Proc. A.A.A.S. **4**: 191. 1851.
T.: *D. rediviva* Torr.
Chrysamphora Greene, Pittonia **2**: 191. 1891.
T.: *C. californica* (Torr.) Greene.

Votes: In favour of conservation **6**; Against conservation **5**; Abstention **0**.

3225 — **Brexia** Noronha ex Thouars, Gen. Nov. Madag. 20. 1806.
T.: *B. madagascariensis* (Lam.) Thouars ex Ker Gawl.

Venana Lam. Tab. Enc. Bot. **2**: 99. 1793.
T.: *V. madagascariensis* Lam.

Votes: In favour of conservation **8**; Against conservation **3**; Abstention **0**.

3338 — **Pirus** L. corr. Hall. Hist. Stirp. Helv. **2**: 34. 1768.
T.: *P. communis* L.

Pyrus L. Sp. Pl. 686. 1753.
T.: *P. communis* L.

Votes: In favour of conservation **0**; Against conservation **11**; Abstention **0**.

3544 — **Gleditschia** L. corr. Scop. Introd. 295. 1777.

Gleditsia L. Sp. Pl. 1056. 1753.

Votes: In favour of conservation **0**; Against conservation **11**; Abstention **0**.

3682 p. — **Sarothamnus** Wimmer, Fl. v. Schlesien 278. 1832.
T.: *S. scoparius* (L.) Wimmer ex Koch.

Cytiso-Genista Ortega, Tab. Bot. 39. 1773.
T.: *C. scoparia* (L.) Rothm.

Votes: In favour of conservation **9**; Against conservation **2**; Abstention **0**.

3848 — **Inocarpus** J. R. & G. Forst. Char. Gen. 65. 1776.
T.: *I. edulis* J. R. & G. Forst.

Aniotum Parkinson, Journ. Voy. Endeavour 39. 1773.
T.: *A. fagiferum* [? Banks ex] Park.

Votes: In favour of conservation **11**; Against conservation **0**; Abstention **0**.

3864 — **Soia** Moench, Meth. Pl. 153. 1794.
T.: *S. hispida* Moench [= *S. max* (L.) Piper].

Glycine L. Sp. Pl. 753. 1753.
T.: *G. javanica* L.

Votes: In favour of conservation **1**; Against conservation **10**; Abstention **0**.

3947 — **Durandea** Planch. Hook. Lond. Journ. Bot. **6**: 594. 1847.
T.: *D. serrata* Planch.

Durandea Delarb. Fl. Auv. ed. 2. 365. 1800.
T.: *D. unilocularis* Delarb.

Votes: In favour of conservation **10**; Against conservation **1**; Abstention **0**.

3990 — **Xanthoxylum** Mill. Gard. Dict. ed. 8. 1768.
T.: *X. americanum* Mill.

Zanthoxylum L. Sp. Pl. 270. 1753.
T.: *Z. clava-herculis* L.

Votes: In favour of the conservation with the spelling *Xanthoxylum* **1**; In favour of the conservation with the Linnean spelling *Zanthoxylum* **4**; Against the conservation **6**; Abstention **0**.

3991 — **Fagara** L. Syst. Nat. ed. 10. 897. 1759.
T.: *F. pterota* L.

Fagara Duham. Traité Arb. & Arbust. **1**: 229. 1755.
T.: *Xanthoxylum americanum* Mill.

Votes: In favour of conservation **7**; Against conservation **4**; Abstention **0**.

4031 — **Correa** Andrews, Bot. Rep. **1**: pl. 18. 1799
T.: *C. alba* Andrews.

Correia Vellozo in Vandelli, Fl. Lusit. & Brasil. Spec. 28. pl. 2. f. 11. 1788.
T.: not established.

Corraea J. E. Smith, Trans. Linn. Soc. **4**: 219. 1798.
T.:

Mazeutoxeron Labill. Rel. Voy. Rech. La Pérouse **2**: 11. pl. 17. 1799-1800.
T.: *M. rufum* Labill.

Votes: In favour of conservation **11**; Against conservation **0**; Abstention **0**. **7** votes in favour to omit *Mazeutoxeron* from the nomina rejicienda, and **1** vote in favour to omit *Corraea* Sm. too.

4190 — **Guarea** Allem. ex. L. Mantissa **2**: 150. 1771.
T.: *G. trichilioides* L.

Elutheria P. Browne, Hist. Jamaica 369. 1756.
T.: no binomial was originally established.

Votes: In favour of conservation **11**; Against conservation **0**; Abstention **0**.

4433 — **Cnidoscolus** Pohl, Pl. Bras. Ic. Descr. **1**: 56. 1827.
T.: *C. hamosus* Pohl.

Jussieuia Houston, Rel. Houst. 6. 1781, non *Jussiaea* L.
T.: *Jatropha herbacea* L.
Bivonea Raf. Specchio Sci. **1**: 156. 1814.
T.: *B. stimulosa* (Michx.) Raf. *Mesandrinia* Raf. Neogen. 3. 1825.
T.: *Bivonea stimulosa* (Michx.) Raf.

Votes: In favour of conservation **3**; Against conservation **1**; Against (conservation unnecessary) **6**; Abstention **1**.

4449 — **Trigonostemon** Blume, Bijdr. **12**: 600. 1825 (*Trigostemon*): Fl. Jav. praef. pag. VIII. 1828 (*Trigonostemon*).
T.: *T. serratus* Blume.

Enchidium Jack, Malay Miscell. **2**: 89. 1822.
T.: *E. verticillatum* Jack.

Votes: In favour of conservation **10**; Against conservation **0**; Abstention **1**.

4470 — **Endospermum** Bentham, Fl. Hongk. 304. 1861.
T.: *E. chinense* Benth.

Endespermum Blume, Cat. Gew. Buitenz. 24. 1823: (*Endospermum*) Endlicher Gen. Pl. 1304. 1841.
T.: *E. scandens* Blume.

Votes: In favour of conservation **9**; Against conservation **0**; Against (conservation unnecessary) **2**; Abstention **0**.

4501 — **Pedilanthus** Neck. Elem. **2**: 354. 1790.
T.: *P. tithymaloides* (L.) Poit.

Tithymalus Mill. Gard. Dict. ed. 4. **3**: 1754.
T.: *T. my[r]tifolius* Mill.
Tithymaloides Ortega, Tab. Bot. ed. 2. 28. 1783.
T.: *T. myrtifolium* (Mill.) Kuntze.
Ventenatia Tratt, Gen. Pl. 86. 1802.
T.: *V. bracteata* (Jacq.) Tratt.

Votes: In favour of conservation **11**; Against conservation **0**; Abstention **0**. — **1** vote in favour of *Pedilanthus* Poit. not *Pedilanthus* Necker.

Tithymalus Trew, Herb. Blackw. **2**: pl. 123. 1754.
T.: *T. peplus* (L.) Gaert.

Tithymalus Mill. Gard. Dict. ed. 4. **3**: 1754.
T.: *T. my[r]tifolius* Mill.

Votes: In favour of conservation **10**; Against conservation **0**; Abstention **1**.

4578 — **Campnosperma** Thwaites in Hook. Kew Journ. **6**: 65. pl. 1. 1854.
T.: *C. zeylanica* Thwaites.

Coelopyrum Jack, Malay Miscell. **2**: 65. 1822.
T.: *C. coriaceum* Jack.

Votes: In favour of conservation **10**; Against conservation **0**; Abstention **1**.

4667 — **Euscaphis** Sieb. & Zucc. Fl. Jap. **1**: 122. pl. 67. 1839.
T.: *E. staphyleoides* Sieb. & Zucc. [= *E. japonica* (Thunb.) Kanitz].

Hebokia Raf. Alsogr. Am. 47. 1838.
T.: *H. japonica* (Thunb.) Raf.

Votes: In favour of conservation **4**; Against conservation **7**; Abstention **0**.

4862 — **Condalia** Cav. Anal. Hist. Nat. **1**: 39. pl. 4. 1799.
T.: *C. microphylla* Cav.

Condalia Ruiz & Pavon, Fl. Per. Prodr. 11. pl. 2. 1794.
T.: *C. repens* ( ) Ruiz & Pavon.

Votes: In favour of conservation **11**; Against conservation **0**; Abstention **0**.

5018 — **Thespesia** Soland. ex Correa, Ann. Mus. Paris **9**: 290. 1807.
T.: *T. populnea* (L.) Sol. ex Correa.

Bupariti Duham. Des semis et plant. arbr. additions 5. 1760.
T.: *B. populnea* (L.) Rothm.

Votes: In favour of conservation **10**; Against conservation **0**; Abstention **1**.

5046 — **Fremontia** Torr. Smithson. Contr. Knowl. **5** (1): 5. 1853.
T.: *F. californica* Torr.

Fremontia Torr. in Frém. Rep. 91. 1843.
T.: *F. vermicularis* Torr.
Fremontodendron Coville, Contr. U.S. Nat. Herb. **4**: 74. 1893.
T.: *F. californicum* (Torr.).

Votes: In favour of conservation **5**; Against conservation **6**; Abstention **0**.

5331 — **Idesia** Maxim. Bull. Acad. Sci. St. Pétersb. **10**: 485. 1866.
T.: *I. polycarpa* Maxim.

Idesia Scop. Introd. 199. 1777.
T.:
Polycarpa Linden ex Carr. Rev. Hort. 330. 1868 [non Loefl. 1758].
Cathayeia Ohwi in Mayebara, Fl. Austro-Higo. 86. 1931.
T.: *C. polycarpa* (Maxim.) Ohwi.

Votes: In favour of conservation **2**; Against conservation **9**; Abstention **0**.

5402 — **Pilocereus** K. Schum. in Engl. & Prantl, Nat. Pfl. **3** (6A): 179. 1894.
T.: *P. leucocephalus* Poselger.

Pilocereus Lem. Cact. Gen. Sp. Nov. Hort. Monvill. 6. 1839.
T.: *P. senilis* (Haw.) Lem.

Votes: In favour of conservation **0**; Against conservation **11**; Abstention **0**.

5403 — **Cephalocereus** Pfeiffer Allg. Gart. **6**: 142. 1838.
T.: *C. senilis* (Haw.) Pfeiffer.

Cephalophorus Lem. Cact. Alig. Nov. Hort. Monvill. XII. 1838.
T.: *C. senilis* (Haw.) Lem.
Cephalophora Cav. 1801.

Votes: In favour of conservation **2**; Against conservation **3**; Against (conservation unnecessary) **6**; Abstention **0**.

5404 — **Phyllocactus** Link, Handb. Erken. Gewächse **2**: 10. 1831.
T.: *P. phyllanthus* (L.) Link.

Epiphyllum Haw. Synops. Pl. Succ. 197. 1812.
T.: *E. phyllanthus* (L.) Haw.

Votes: In favour of conservation **1**; Against conservation **8**; Against (conservation unnecessary) **1**; Abstention **1**.

5405 — **Epiphyllum** Haw. sensu Pfeiffer, Enum. Diagn. Cact. 123. 1837, non Haw. 1812.
T.: *E. truncatum* Haw.

Zygocactus K. Schum. in Mart. Fl. Bras. **4** (2): 223. 1890.
T.: Z. *truncatus* (Haw.) K. Schum.

Votes: In favour of conservation **1**; Against conservation **10**; Abstention **0**.

5421 — **Peireskia** Mill. corr. Steud. 1841. *Pereskia* Mill. 1754.

Votes: In favour of conservation **0**; Against conservation **11**; Abstention **0**.

5543 — **Bucida** L. Syst. Nat. ed. 10. 1368. 1759.
T.: *B. Buceras* L.

Buceras P. Browne, Hist. Jamaica 221. pl. 23. 1756.
T.: *B. Bucida* Crantz.

Votes: In favour of conservation **9**; Against conservation **2**; Abstention **0**.

5852 — **Schefflera** J. R. & G. Forst. Char. Gen. 45. 1776.
T.: *S. digitata* J. R. & G. Forst.

Sciodaphyllum P. Browne Hist. Jamaica 190. pl. 19. f. 1, 2, 1756.
T.: *S. brownii* Spreng.

Votes: In favour of conservation **10**; Against conservation **0**; Abstention **1**.

5967 — **Physospermum** Cusson Mem. Soc. Medic. Paris *1782-83:* 279. 1787.
T.: *P. cornubiense* (Torn.) DC.

Danaa All. Fl. Pedem. **2**: 34. pl. 63. 1785.
T.: *D. aquilegifolia* All. [= *D. cornubiensis* (Torn.) Burnat].

Votes: In favour of conservation **5**; Against conservation **4**; Against (conservation unnecessary) **2**; Abstention **0**.

6065 — **Silaus** Bernh. 1800. *Silaum* Mill. 1754.

Votes: In favour of conservation **1**; Against conservation **9**; Abstention **1**.

6070 — **Selinum** L. Sp. Pl. ed. 2. 350. 1762 p.p. emend. Gaertn. Fruct. **1**: 89. pl. 21. f. 8. 1788; non L. 1753.
T.: *S. carvifolia* (L.) L.

Selinum L., Sp. Pl. 244. 1753.
T.: *S. sylvestre* L.
Carvifolia Vill. Hist. pl. Dauph. **1**: 192. 1786; **2**: 629. 1787.
T.: *C. crantzii* Vill.
Thysselinum Adans. Fam; **2**: 100. 1763.
T.: *Selinum sylvestre* L.

Votes: In favour of conservation **9**; Against conservation **1**; Abstention **1**.

6167 — **Pirola** L. corr. Necker, Act. Theod. Pal. **2**: 488. 1770. *Pyrola* L. Sp. Pl. 396. 1753.

Votes: In favour of conservation **0**; Against conservation **11**; Abstention **0**.

6260 — **Epacris** Cav. Icon. **4**: 25. pl. 344. 1797.
T.: *E. longiflora* Cav.

Epacris J. R. & G. Forst. Char. Gen. 19. 1776.
T.: *E. longifolia* J. R. & G. Forst.

Votes: In favour of conservation **9**; Against conservation **2**; Abstention **0**.

6291 — **Labisia** Lindley, Bot. Reg. n. s. **18**: t. 48. 1845.
T.: *L. pothoina* Lindley.

Angiopetalum Reinwardt. Syll. Plant. **2**: 1. 1826.
T.: *A. punctatum* Reinwardt.

Votes: In favour of conservation **11**; Against conservation **0**; Abstention **0**.

6361 — **Achras** L. emend. Loefl. Syst. Nat. ed. 10. **2**: 988, 1381. 1759.
T.: *A. Zapota* L.

Achras L. Sp. Pl. 1190. 1753.
Sapota Mill. Gard. Dict. Abr. ed. 4. **3**: p.p. 1754.
Achras L. emend. Loefl. Iter. Hisp. 186. 1758.
Manilkara Adans. Fam. Pl. **2**: 166. 1763.

Votes: In favour of conservation **2**; Against conservation **5**; Against (conservation unnecessary) **2**; Abstention **2**.

6364 — **Pouteria** Aubl. Hist. Pl. Guian. 85. pl. 33. 1775. (fruct. excl.).
T.: *P. guianensis* Aubl.

? ? ?

Votes: In favour of conservation **1**; Against conservation **4**; Against (conservation unnecessary) **6**; Abstention **0**.

6373 — **Dipholis** A. DC. Prodr. **8**: 188. 1844.
T.: *D. salicifolia* (L.) A. DC.

Spondogona Raf. Sylva Tell. 35. 1838.
T.: *S. nitida* Raf.

Votes: In favour of conservation **10**; Against conservation **1**; Abstention **0**.

6410 — **Halesia** Ellis ex L. Syst. Nat. ed. 10. 1369. 1759.
T.: *H. carolina* L.

Halesia P. Browne, Hist. Jam. 205. pl. 20. 1756.
T.: No binary conservation was established.

Votes: In favour of conservation **11**; Against conservation **0**; Abstention **0**.

6421 — **Forsythia** Vahl, Enum. Pl. **1**: 39. 1805.
T.: *F. suspensa* (Thunb.) Vahl.

Forsythia Walt. Fl. Carol. 153. 1788.
T.: *F. scandens* Walt. [= *Decumaria barbara* L.].
Rangium Juss. Dict. Sci. Nat. *24*: 200. 1822.
T.: No combination established.

Votes: In favour of conservation **11**; Against conservation **0**; Abstention **0**.

6496 — **Erythraea** Neck. corr. Borkh. Arch. für Bot. **1** (1): 30. 1796.

Centaurium Hill. Brit. Herb. 62. 1756.
Centaurion Adans. Fam. Pl. **2**: 502, 535. 1763.
Erithaea Neck. Elem. **2**: 10. 1791.

Votes: In favour of conservation **0**; Against conservation **11**; Abstention **0**.

6545 — **Limnanthemum** S. G. Gmelin Nov. Comm. Acad. Sci. Imp. Petrop. **14** (1): 527. pl. 17. f. 2. 1770.

Nymphoides Hill. Brit. Herb. 77. 1756.

Votes: In favour of conservation **1**; Against conservation **10**; Abstention **0**.

7003 p. — **Pharbitis** Choisy, Mém. Soc. Phys. Hist. Nat. Genève **6**: 438. 1833.
T.: *P. hispida* Choisy [= *P. purpurea* (L.) J. Voigt].

Diatremis Raf. Ann. Gén. Sci. Phys. **8**: 271. 1821.
T.: *Convolvulus nil* L.
Diatrema Raf. Herb. Raf. 80. 1833; Fl. Tellur. **4**: 72. 1836.
T.: *D. purpurea* (L.) Raf.
Convolvuloides Moench, Meth. 451. 1794.
T.: *C. purpurea* (L.) Moench.

Votes: In favour of conservation **8**; Against conservation **2**; Abstention **1**.

7112 — **Arnebia** Forsk. Fl. Aeg.-Arab. p. XXXVIII & LXII, 62. 1775.
T.: *A. tinctoria* Forsk.

Echioides Ortega, Tab. Bot. 7. 1773.

Votes: In favour of conservation **1**; Against conservation **4**; Against (conservation unnecessary) **6**; Abstention **0**.

7305 p. — **Calamintha** Lam. Fl. Franc. **2**: 393. 1778.
T.: *C. arvensis* Lam. [= *C. acinos* (L.) Clairv.].

Clinopodium L. Sp. Pl. 587. 1753.
T.: *C. vulgare* L.

Votes: In favour of conservation **0**; Against conservation **9**; Abstentions **2**.

7407 p. — **Lycopersicum** Hill. Veg. Syst. **9**: 32. 1765.
T.: *L. esculentum* Mill.

Lycopersicon Mill. Gard. Dict. abr. ed. 4. **2**: 1754.
T.: *L. esculentum* Mill.
Lycomela Heister ex Fabricius, Enum. Meth. Pl. **1**: 194. 1759.
T.: No binomial established.

Votes: In favour of conservation **4**; Against conservation **6**; Against (conservation unnecessary) **1**; Abstention **0**.

7800 — **Ramonda** Rich. in Pers. Syn. **1**: 216. 1805.
T.: *R. pyrenaica* Rich. [= *R. Myconi* (L.) Reichb.].

Ramondia Mirbel, Bull. Soc. Philom **2** (47): 179. 1801.
T.: *R. flexuosa* (L.) Mirbel.
Chaixia Lapeyr. Hist. Abrég. Pl. Pyren. Suppl. 38. 1818.
T.: *C. Myconi* (L.) Lapeyr.
Myconia Lapeyr, Hist. Abrég. Pl. Piren. 115. 1813 non Neck. 1790.
T.: *M. borraginea* Lapeyr.

Votes: In favour of conservation **8**; Against conservation **3**; Abstention **0**.

7809 — **Didissandra** C. B. Clarke in DC. Monog. Phan. **5**: 65. 1883.
T.: *D. elongata* DC.

Ellobum Blume, Bijdr. part. **14**: 746. 1826.
T.: *E. montanum* Blume.

Votes: In favour of conservation **10**; Against conservation **1**; Abstention **0**.

Follow. 7878 — **Cyrtandropsis** Lauterbach, Nova Guinea. **8**: 331. 1910.

Cyrtandropsis C. B. Clarke in DC. Monogr. Phan. **5**: 137. 1883.

Votes: In favour of conservation **2**; Against conservation **3**; Against (conservation unnecessary) **6**; Abstention **0**.

8209 — **Cosmibuena** Ruiz & Pavon, Fl. Per. Chil. Descr. **3**: 2. 1802.
T.: *C. obtusifolia* Ruiz & Pavon.

Cosmibuena Ruiz & Pavon, Fl. Chil. Prodr. 10. pl. 2. 1794.
T.: *Hirtella cosmibuena* Lam.
Buena Pohl, Pl. Bras. **1**: 8. 10. 1827, non Cav. 1800.
T.:

Votes: In favour of conservation **10**; Against conservation **1**; Abstention **0**.

8237 — **Acranthera** Arn. ex Meisn. Pl. Vasc. Gen. **2**: 115. 1838.
T.: *A. ceylanica* Arn. ex Meisn.

Psilobium Jack. Malay Miscell. **2**: 84. 1822.
T.: *P. nutans* Jack.

Votes: In favour of conservation **9**; Against conservation **1**; Abstention **1**.

8598 — **Citrullus** Forsk. Fl. Aeg.-Arab. 167. 1775.
T.:

Anguria Mill. Gard. Dict. Abr. ed. 4. **1**: AN. 1754. (non L. 1763).
Colocynthis Ludwig, Inst. Regn. Veg. ed. 2. 139. 1757.

Votes: In favour of conservation **0**; Against conservation **10**; Abstention **1**.

8598 — **Citrullus** Schrader, in Ecklon & Zeyher, Enum. Pl. Afr. Austr. Extratrop. 279. 1836.
T.: *C. vulgaris* Schrad.

Auguria Mill. Gard. Dict. Abr. ed. 4. **1**: AN. 1754, non L. 1763.
T.: *A. citrullus* Mill.
Colocynthis Ludwig, Inst. Regn. Veg. ed. 2. 139. 1757.
T.: No binomial proposed.
Citrullus Necker, Elem. Bot. **1**: 240. 1790.
T.: No binomial proposed.

Votes: In favour of conservation **8**; Against conservation **1**; Abstentions **2**.

8649 — **Specularia** A. DC. Monogr. Campan. 344. 1830.
T.: *S. speculum* A. DC.

Legousia Durande, Fl. de Bourg. **1**: 37. 1782, **2**: 26. 1782.
T.: *L. arvensis* Durande *[L. speculum veneris* (L.) Fisch.].
Apenula Neck. Elem. **1**: 234 (1790).
Prismatocarpus L'Herit. Sert. Angl. 2. 1788.

Votes: In favour of conservation **1**; Against conservation **9**; Against (conservation unnecessary) **1**; Abstention **1**.

8926 — **Conyza** Less. Syn. Gen. Comp. 203. 1832.
T.: *C. chilensis* Spreng.

Conyza L. Sp. Pl. 861. 1753.
T.: *C. squarrosa* L.
Marsea Adans. Fam. Pl. **2**: 122, 595. 1763.
T.: No binary combination established.
Gemmaria Noronha, Verh. Batav. Gen. **5** (Art. 4): 2. 1790.
T.: No binary combination established.
Eschenbachia Moench. Meth. 573. 1794.
T.: *E. globosa* Moench. [=*Erigeron aegyptiacum* L.].
Leptilon Raf. Am. Mon. Mag. **2**: 268. 1818. Not validly published.
Dimorphanthes Cass. Bull. Soc. Philom. **1818**: 30. 1818. Dict. Sci. Nat. **13**: 254. 1819.
T.: *D. gouani* (L.) Cass.
Laennecia Cass. Dict. Sci. Nat. **25**: 91. 1802.
T.: *L. gnaphalioides* (H.B.K.) Cass.

Votes: In favour of conservation **11**; Against conservation **0**; Abstention **0**.

9297 — **Amblyopappus** Hook. & Arn. Journ. Bot. Hook. **3**: 321. March 1841.
T.: *A. pusillus* Hook. & Arn.

Aromia Nutt. Trans. Am. Philos. Soc. II. **7**: 395. March 1841.
T.: *A. tenuifolia* Nutt.

Votes: In favour of conservation **4**; Against conservation **4**; Against (conservation unnecessary) **3**; Abstention **0**.

9333 — **Diotis** Desf. Fl. Atl. **2**: 260-261. 1798.
T.: *D. maritima* (L.) Cass.

Diotis Schreb. Gen. Pl. ed. 8. **2**: 633. 1791.
T.: *D. ceratoides* Willd.
Otanthus Hoffmgg. & Link. Fl. Portug. **2**: 364. 1820.
T.: *O. maritimus* (L.) Hoffmgg. & Link.

Votes: In favour of conservation **5**; Against conservation **6**; Abstention **0**.

9425 — **Dimorphotheca** (Vaill.) Moench, Meth. 585. 1794.
T.: *D. pluvialis* (L.) Moench.

Gattenhoffia Neck. Elem. Bot. **1**: 39. 1790.
T.: *G. pluvialis* (L.) Druce.

Votes: In favour of conservation **10**; Against conservation **1**; Abstention **0**.

9551 — **Haenselera** Boiss. ex DC. Prodr. **7**: 83. 1838.
T.: *H. granatensis* Boiss. ex DC.

Haenselera Lag. Gen. Sp. Pl. 13. 1816.
T.:
Rothmalera Font-Quer in Font-Quer et Rothm. Broteria. **9**: 151. 1940.

Votes: In favour of conservation **1**; Against conservation **10**; Abstention **0**.

9594 — **Mulgedium** Cass. Dict. Sci. Nat. **33**: 296. 1824.
T.: *M. lyratum* Cass. [= *M. floridanum* (L.) DC.].

Cicerbita Wallr. Sched. Crit. 433. 1822.
T.: *C. alpina* (L.) Wallr.

Votes: In favour of conservation **1**; Against conservation **9**; Abstention **1**.

The Secretary of the Subcommittee
Rodolfo E. G. Pichi-Sermolli

Proposals for the Paris Congress*

Proposal no. 182

Proposed by: Harold St John, Honolulu

Art. 33

Add as the second paragraph (after *Adiantum capillus-veneris):* "Epithets of species or of subdivisions of species may be taken from any source whatever, and may even be composed arbitrarily.

Examples: *danielis, paysonorum, koa."*

Argument: Actually a botanist has complete liberty of choice in coining new names or epithets. As to generic names this liberty is confirmed by Art. 30, "It may be taken from any source whatever, and may even be composed in an absolutely arbitrary manner." Rec. 30 A then gives good advice on how to coin or to latinize names to be published for new genera.

For epithets of species and their subdivisions, there is no Article covering the manner of their formation. Sound admonitions are given in Rec. 33 C concerning publishing epithets that are long, similar, unauthorized, etc.; and Rec. 82 C, 82 D, 82 E, 82 F give detailed advice on how to coin epithets by latinizing names of men, or women, or geographic names, or how to form compound words from two or more Greek or Latin words. All this instruction and counseling is good, and should be heeded in the future, but there is needed an article stating clearly the full liberty of choice, in the past and in the future, of coining epithets from any source, whether non-classic languages or even from an arbitrarily invented word.

Art. 59

Add the following: "If an author publishing previous to 1953 did not state a basinym, but his published name or epithet was evidently based upon the same name or epithet previously published in a group considered synonymous, then the second publication was a new combination and the infered original author's name is cited enclosed in braces { }.

Example: *Kalmia polifolia* Wang, var. *rosmarinifolia* {Pursh} Rehder in L. H. Bailey, Cyclop. Am. Hort. 2 : 854, 1900; Rehder, Bibliog. Cult. Trees Shrubs, pp. xii, 525. 1949."

Argument: It has long been troublesome to know how to cite the authorities for a combination for which the second author did not cite any basinym or reference, but for which it is perfectly obvious that he was adopting a name or epithet previously used for an earlier synonym.

By inference his name is a transfer. If today

*) Proposals 180-181 (see above) and 182-185 were received after 1 December 1953. They could not be included in the Recueil Synoptique and the Section of Nomenclature will have to decide whether they will still be taken into consideration. The proposals 166-175 and 178-179 were formally published at an earlier date, the present publication gives further documentation.

we cite it with an original parenthetical author, we indicate a positive reference that we cannot prove. Rehder (Bibliog. Cult. Trees Shrubs p. xii, 1949) has proposed that such infered basinyms be indicated by placing their author's name in square brackets. He has used this device throughout his large bibliography here cited. It distinguishes the infered from the clearly cited basinyms. However, brackets are already authorized in the code, (Art. 59) for indicating the first author of a pre-starting-point name, such as the genus *Polygonum* [Tourn.] L., or the species *Agaricus elegans* [Pers.] Fries. Rehder's use of brackets to indicate a second kind of thing is confusing. It is proposed that a new symbol or sign be used, that a pair of braces { } be used to enclose the infered first author's name.

Art. 79 (3)

Delete the phrase, "with or without the addition of a transcribed symbol." With this deletion it will read, "epithets are illegitimate, ... (3) When they exactly repeat the generic name (tautonym)."

Delete from the examples under (3) *Nasturtium nasturtium-aquaticum.*

Argument: This extension of the tautonym rule to epithets with transcribed symbols was new in 1950. Such Linnaean epithets as *nasturtium-aquaticum* (L.) Karst. have always been legal and accepted. The epithet *nasturtium-aquaticum* does not exactly duplicate the generic name *Nasturtium.* It is even less similar to the generic name than the epithets of *Gossypium gossypioides,* and *Matricaria matricarioides* which are given in the Code as examples of acceptable epithets, (see Arts 81, 65) or than *Samanea saman,* or *Cajanus cajan.* As proposed above, the section dealing with transcribed symbols should be repealed. Then the Art. 79 (3) will apply to tautonyms, as stated, and it will not apply to numerous other epithets that are quite different in spelling from the generic names, and hence are not tautonyms.

Proposal no. 183

New Art. 77 bis

"Teratologische Fälle werden hervorgehoben durch *teras* in der Abbreviatur *ter.* mit einem nachfolgenden Namen für den betreffenden Fall der Abweichung; ein zweiter Name kann den ersten Namen unterteilen. Beispiel: *Lecanora subfuscata* Magn. ter. *secundarium. Diploschistes scruposus* (Schreb.) Norm. var. *bryophilus* (Ehrh.) Müll. Arg. ter. *secundarium receptaculi. Ochrolechia parella* (L.) Mass. ter. *secundarium rosodisci.*"

Bemerkungen: Die Proposition ist in meiner Arbeit 'Über eine einheitliche Benennung von Bildungsabweichungen bei den Flechten' (Ber. D. Bot. Ges. 67 : 59-68. 1954) näher begründet und im einzelnen praktisch ausgeführt worden. Als *teras* — zurückgehend auf das Grundwort des Terminus Teratologie — wird das bezeichnet, was von manchen (!) Autoren durch die Termini Aberration, Abnormität, Anomalie, Bildungsabweichung, lusus, Modifikation, Monstrosität, pathologischer Fall, status morbosus und teratologischer Fall bezeichnet wurde. Begriffsdefinition: Terata sind morphologisch-anatomische Wachstumserscheinungen, die nicht erblich sind und also nur das einzelne Individuum (praktisch nur Teile des Individuums) betreffen und nicht zum normalen Entwicklungsgang gehören, und deren Merkmale nicht zu denen gehören, die das Taxon umschreiben, zu dem das Individuum gehört.

Proposed by: V. J. Grumman, Berlin.

Proposal no. 184

Proposal for the conservation of the generic name **Garuga** Roxburgh (1814) of the Burseraceae, versus *Katoukalesiam* Adanson (1763).

Garuga Roxburgh, Hort. Bengal 33. 1814; Roxburgh, Pl. Corom. 3: 5. 1819; Roxburgh, Fl. Ind. 2: 400. 1820; DeCandolle, Prodr. 2: 80. 1825; Endlicher, Gen. plant. 1137. 1839; Blume, Mus. bot. Lugd.-Bat. 1. 15: 227. 1850; Miquel, Fl. Ned. Ind. 1. 2: 654. 1859; Bentham & Hooker, Gen. plant. 1: 323. 1862; Baillon. Hist. pl. 5: 313. 1874; Hooker, Fl. Brit. Ind. 1: 528. 1875; Engler in DC, Mon. Phan. 4: 4. 1883; Engler in Engler & Prantl, Nat. Pfl. fam. ed. 1. 3 (4): 256. 1896 and ed. 2. 19a: 416. 1931; Lam. Bull. Jard. Bot. Buitenz. 3. 12: 325. 1932; Kalkman, Blumea 7 (2): 459. 1953.

Type species: *Garuga pinnata* Roxburgh, l.c.

Size and area: 4 species in Continental South East Asia, Northern and Eastern Malaysia, Northern Australia, Western Pacific.

Katoukalesiam Adanson, Familles des Plantes 2: 510, 531. 1763 (Katou. Kalesiam on p. 510).

Discussion: When publishing the the name *Katoukalesiam* under the heading "Genres nouveaux", Adanson legalized the vernacular name "Katou-Kalesjam", given by Van Rheede tot Draakenstein, Hort. Ind. Malabar. 4: 69. *t.* 33, 1673. Adanson did not mention a specific name.

51 years later Roxburgh based his *Garuga pinnata* on the same figure of the Hortus Malabaricus, without mentioning Adanson's name, which has never been used again. The name *Garuga* Roxburgh however, has been generally accepted in all taxonomic and other publications.

To avoid four new combinations and alteration of a wellknown into an unknown and unpronounceable name, it is proposed to conserve *Garuga* Roxburgh over its earlier synonym *Katoukalesiam* Adanson.

Proposed by: C. Kalkman, Rijksherbarium, Leiden.

Proposal no. 185

Proposal for the conservation of the generic name **Orthothecium** Br. eur. (Musci; see also Recueil Synoptique, Paris p. 118).

Nom. cons.: *Orthothecium* Br. eur. 1851.

Type spec.: *O. rufescens* (Brid. ex Sm.) Br. eur.

Nom. rejic.: *Holmgrenia* Lindb. in Öfvers. K.V.A. Förh. 1862, No. 10 (printed in 1863).

Argumentation: *Orthothecium* Br. eur. is illegitimate because it is a later homonym to the Sterculiaceous genus *Orthothecium* Schott & Endlicher, which was described and validly published in Melet. Bot. 31 (1832) with a single species *O. lhotskyanum*. Lindberg therefore introduced *Holmgrenia*. This name has been very little used and I think most bryologists do not know about it. Grout's Flora of North America is the only handbook, where I have found the genus called *Holmgrenia*. For all that North American bryologists use the wellknown *Orthothecium* Br. eur. (e.g. Steere in Polunin: Botany of Canadian E. Arctic 2: 469-470. 1947).

Orthothecium Schott & Endlicher now seems unanimously sunk under the genus *Helicteres* and has been dormant for over 100 years.

In my opinion *Orthothecium* Br. eur. is a sound candidate for conservation.

Proposed by: O. Mårtensson, Uppsala.

Proposal no. 166 *

Holomitrium Endlicher, Genera Plantarum 48. 1836, versus *Olomitrium* Brid., Bryol. univ. 1 : 226. 1826 [See also Taxon 3 (2): 75].

Holomitrium Endl.

Adopted by: Hornschuch, Fl. bras. 1(2) : 17 (1840); C. Müller, Syn. musc. 1 : 349 (1849); Dozy & Molkenboer, Musc. frond. Arch. Ind. 18 (1854); Dozy & Molkenboer, Bryol. jav. 1 : 86 (1858); Jaeger & Sauerb., Gen. spec. m. adumbr. 1 : 150 (1871), 2 : 761 (1878); Mitten, J. Linn. Soc. Bot. 12 : 56 (1869); C. Müller, Gen. m. fr. 253 (1901); Brotherus in Engl. — Pr. Nat. Pfl. f. ed. 1. 1(3) : 320 (1901), ed. 2. 10 : 201 (1924); Fleischer, Musc. Fl. Buitenz. 1 : 129 (1902); Bailey, Compreh. Cat. Queensl. Pl. 656 (1913); Herzog, Geogr. Moose 84 (1926); Bartram, Philipp. J. Sc. 68 : 51 (1939); Bartram, Fieldiana, Bot. 25 : 59 (1949).

Number of species: 35 (Brotherus 1924), tropics.

Type-species (lectotype): *Holomitrium perichaetiale* (Hooker) C. Müller. Syn. musc. 1 : 351. 1849, based on *Trichostomum perichaetiale* Hooker, Musc. exot. 1 : *t.* 73. 1818.

Olomitrium Brid. Adopted by nobody.

Argument: *Olomitrium* and *Holomitrium* are different names in the Rules, as can be concluded from Rec. 82A.

The first name has priority; the latter has been in constant and general use from 1836 and ought to be conserved.

Proposed by: W. D. Margadant, Wageningen.

Proposal no. 167

Amblyodon Bruch, Schimper & Gümbel, Bryologia europaea 10 : 5, *t. l.* 1841, versus *Amblyodum* Palisot de Beauv., Mag. enc. ix Ann. 5 : 323. 1804 [see also Taxon 3(2): 75].

Amblyodon Br. & Sch.

Adopted by: C. Müller, Syn. musc. 1 : 126 (1849); Wilson, Bryol. brit. 267 (1855); Schimper, Syn. m. eur. ed. 1 : 404 (1860), ed. 2 : 496 (1876); De Notaris, Epil. bri. it. 440 (1869); Jaeger & Sauerbeck, Gen. spec. m.

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*) The following proposals (166-175, 178-179) were published either in Taxon 3(2) or in the Recueil Synoptique (Paris) or in both. Since they were received after 1 Dec. 1953 it was impossible to provide the documentation together with the formal publication. See also Taxon 3(2): 75. 1954.

adumbr. 1 : 515 (1874), 2 : 698 (1878); Lesquereux & James, Moss. N. Am. 211 (1884); Limpricht, Rabenh. Krypt. fl. ed. 2, 4(2) : 502 (1893); Braithwaite, Br. Mossfl. 2 : 125 (1895); C. Müller, Gen. musc. fr. 328 (1901); Brotherus in Engl. — Pr. Nat. Pfl. f. ed. 1. 1(3) : 627 (1904), ed. 2. 10 : 444 (1925); Fleischer, Musci Fl. Buitenz. 2 : 494 (1904). 4 : xxviii (1923); Brotherus, Fl. Fenn. 1 : 343 (1923); Mönkemeyer, Rabenh. Krypt. fl. ed. 2. Erg. b. 4 : 570 (1927); Gams, Kl. Krypt. fl. Mitteleur. ed. 2. 1 : 126 (1948); Richards & Wallace, Trans. Br. Bryol. Soc. 1(4) : xviii (1950).

Number of species: 1, widely distributed in the Northern hemisphere.

Type-species: *Amblyodon dealbatus* Br. & Sch., l.c., based on *Meesia dealbata* Hedwig 1801.

Amblyodum P. Beauv.

Adopted by: P. Beauv. Prodr. 5me 6me fam. aethéogamie 33 (1805); P. Beauv., Mém. Soc. Linn. Par. 1 : 462 (1882).

Number of species: in present circumscription 1.

Type-species: *Amblyodum dealbatum* P. Beauv., l.c., based on *Meesia dealbata* Hedwig 1801.

Argument: The names *Amblyodum* and *Amblyodon* are considered different names in the Rules, as can be seen by the example (Art. 82) *Phoradendron* Nutt. vers. *Phoradendrum*. The name *Amblyodum* has priority; *Amblyodon*, however, is widely and only used from 1841 up till now. Therefore, this name ought to be conserved.

Proposed by: W. D. Margadant, Wageningen.

Proposal no. 168

Pleuropus Griffith, Notulae ad plantas asiaticas 2 : 468. 1845 versus *Pleuropus* [Pers. ex] Gray, Nat. Arrang. Br. Pl. 1 : 615. 1821.

Pleuropus Griff.

Adopted by: Brotherus, in Engl.-Pr. Nat. Pfl. f. ed. 1. 1(3) : 1136 (1908), ed. 2. 11 : 355 (1925); Fleischer, Musc. Fl. Buitenz. 4 : 1543 (1922); Herzog, Geogr. Moose 165 (1926); Brühl, Rec. Bot. Survey India 13(1) : 94 (1931); Bartram, Philipp. J. Sc. 68 : 297 (1939); Bartram, Fieldiana Bot. 25 : 351 (1949).

Number of species: 15; tropics, 1 extending into temperate Asia.

Type-species: *Pleuropus fenestratus* Griff.

Pleuropus [Pers. ex] Gray.

Listed as a nomen rejiciendum in the case of the conservation of *Panus* (Fungi), Stockholm Code p. 77, 1952.

Palamocladium C. Müller Flora 82 : 465, nomencl. syn. of *Pleuropus* Griff.; however, type-species *Pl. neilgheriensis* (Mont.) C. M.

Adopted by: Brotherus, Engl. Bot. J. 24 : 280 (1897); Paris, Index Bryol. ed. 2. 3 : 348 (1905).

Argument: *Pleuropus* [Pers. ex] Gray is rejected for *Panus*, leaving only a formal objection against the use of *Pleuropus* Griff., which can be removed by conserving this name. It has been in constant use from 1908.

Proposed by: W. D. Margadant, Wageningen.

Proposal no. 169

Saccogyna Dumortier, Commentationes botan. 113. 1822, versus *Lippius* Gray, Nat. Arrang. Br. Pl. 1 : 679, 1821, and versus *Sykorea* Corda, Beitr. Naturgesch. 12 : 653 (1829).

Saccogyna Dum.

Adopted by: Endlicher, Gen. Pl. 1343 (1839); Gottsche, Lindenb. & Nees, Syn. Hep. 194 (1844); Schiffner, Hepat. Fl. Buitenz. 208 (1900); Stephani, Spec. Hep. 3 : 266 (1908); K. Müller, Rabenh. Krypt. Fl. ed. 2. 6(1) : 853 (1911); Herzog, Geogr. Moose 498 (1926); MacVicar, Stud. Handb. Br. Hep. ed. 2 : 255 (1926); Buch, Evans & Verdoorn, Ann. Bryol. 6 : 317 (1922), 10 : 4 (1938).

Number of species: 14 (Stephani 1922), chiefly tropical; when united with *Geocalyx* Nees (1836) eventually 17.

Type-species: *Saccogyna viticulosa* (L.) Dum., based on *Jungermannia viticulosa* L. Sp. pl. 1131, pro parte typica (cit. Micheli).

Lippius Gray l.c. 706.

Adopted by: Carruthers, Journ. of Bot. 3 : 297-302. 1865.

Type-species: *Lippius viticulosus* Gray, l.c. based on *Jungermannia viticulosa* L.

Sykorea Corda.

Adopted by: Corda in Sturm, Fl. germ. 2 (19-20) : 41 (1833).

Type-species: *S. viticulosa* (L.) Corda, based on *Jungermannia viticulosa* L.

Argument: The name *Lippius* Gray has been discarded by all authors after 1865 because of the existence of *Lippia* L. Sp. pl. 2 : 133 (Verbenaceae). However, these names are considered different in the Rules. To

retain this widely used name, *Saccogyna* Dum. ought to be conserved.

Proposed by: W. D. Margadant, Wageningen.

Proposal no. 170

Grimaldia Raddi, Opusc. Sc. Bologna 2 : 356. 1818 versus *Grimaldia* Schrank, Allg. Bot. Biblioth. 4 : 185. 1805 and *Mannia* Opitz (or Opiz) in Corda, Beitr. Naturgeschichte 12 : 646 (1828).

Grimaldia Raddi.

Adopted by: Corda, Beitr. Naturg. 12 : 646 (1829); Lindenberg, Flora 16 : 161 (1833); Endlicher, Gen. pl. 44 (1836), 1337 (1839) (error Grimmaldia); Nees, Hep. eur. 4 : 221 (1838); Gottsche, Lindenb. & Nees, Syn. Hep. 549 (1846); Rabenhorst, Kryptog. fl. Sachsen 1 : 303 (1863); Schiffner in Engl. — Pr. Nat. Pfl. f. 1(3) : 31 (1893); Stephani, Spec. Hep. 1 : 89 (1898); K. Müller, Rabenh. Kryptog. fl. ed. 2, 6(1) : 259 (1907); Meylan, Beitr. Kryptog. fl. Schweiz 6(1) : 87 (1924); Herzog, Geogr. Moose 184 (1926); Zodda, Fl. It. Crypt. 4(1) : 74 (1934); K. Müller, Rabenh. Kryptog. fl. Ergänz. b. 6 : 227 (1940); Gams, Kl. Kryptog. fl. Mitteleur. ed. 2. 1 : 25, 26 (1948).

Number of species: 5, chiefly in the Northern hemisphere.

Type-species: *Grimaldia dichotoma* Raddi l.c., a taxonomical synonym of *Marchantia androgyna* L. Sp. pl. 1138. 1753.

Grimaldia Schrank (Leguminosae).

Adopted by: Schrank, Denkschr. Ak. Münch. 113 (1808); Link, Handb. 2 : 141 (1831); Steudel, Nomencl. bot. ed. 2. 1 : 707 (1840).

Adopted as a segregate of *Cassia* L. by: Britton & Rose in Bailey, Gent. Herb. 2 : 203 (1930); Britton & Rose N. Am. Fl. 23 : 299 (1930); Britton & Rose Ann. N. Y. Acad. Sc. 35 : 187 (1936); Pittier, Cat. Fl. Venez. 1 : 375 (1945).

Number of species: 15, in the New World.

Type-species: *Grimaldia opifera* Schrank.

Mannia Opitz (or Opiz).

Adopted by: Wheeler, Bryologist 37 : 87 (1934); Frye & Clark, Univ. Wash. Publ. Biol. 5 : 60 (1937); Buch, Evans & Verdoorn, Ann. Bryol. 10 : 8 (1938); Evans, Chronica Bot. 4 : 223-225 (1938).

Number of species: 5, in the Northern hemisphere.

Type-species: *Mannia raddii* Opiz l.c., nomenclatural synonym of *Grimaldia dichotoma* Raddi.

Cyathophora Gray non P. Beauv. Fl. Oware Benin Afr. 1805.

Adopted by: Carruthers, Journ. Bot. 3 : 297 (1865).

Type-species: *C. angustifolia* (L.) Gray, syn. of *Marchantia angustifolia* L.

Discussion: The two criteria for nomina conservanda mentioned in Art. 24 are fulfilled for the name *Grimaldia* Raddi: in general use in the 50 years following their publication (it may be said 100 years: 1833—1934) *and* (instead of: or) used in monographs and important floristic works up to 1890. This being the case there would have been no objection against conservation before 1930. In this year *Grimaldia* Schrank was taken up for a segregate of *Cassia* L. validly and the name *Mannia* afterwards for the genus of Hepaticae. Things could have been left at that. However, K. Müller (1940) explicitly treats *Grimaldia* Raddi as a nomen conservandum. This is made a proposal here in order to reach a decision. If this proposal be accepted the 15 species of the segregate of *Cassia* will have to be renamed. Tradition of 100 years use of the name in Hepaticae pleads for acceptance.

Proposed by: W. D. Margadant, Wageningen.

Proposal no. 171

Proposal for the conservation of the generic name *Conocephalus* of the Moraceae: 1964. *Conocephalus* Blume, Bijdragen Flora Nederlandsch Indië 483. 1825, versus *Conocephalus* Dumortier, Commentationes botanicae 115. 1822 and versus *Conocephalus* Necker, Elementa Botan. 3 : 344. 1791 (unitary name).

Conocephalus Blume.

Adopted by: Lindl. Bot. Reg. 14 : *t. 1203* (1828); Tréc. Ann. Sc. Nat. 3(8) : 88 (1847); Miq. Ann. Mus. B. Lugd. Bat. 3 : 210 (1867); Benth. & Hook. Gen. Plant. 3 : 380 (1883); Hook f. Fl. Br. Ind. 5 : 545 (1888); Durand, Ind. Gen. Phan. 377 (1888); Engler in Engl. — Pr. Nat. Pfl. f. ed. 1, 3(1) : 93 (1889); Warburg, Bot. Jahrb. 18 : 189 (1894), transfer of the type-spec. of Poikilospermum Zipp. to Conocephalus Blume; C. H. Wright, J. Linn. Soc. 26 : 471 (1900); Perkins, Frag. Fl. Philipp. 167 (1905); Barg., Nuov. Giorn. B. It. n.s. 9 : 218 (1902); Merrill, Phil. Gov. Lab. Bur. Bull. 27 : 80 (1905); Renner, Engl.

Bot. Jahrb. 39 : 409 (1907); Elmer, Leafl. Phil. Bot. 1 : 278 (1908); 8 : 2770 (1915); H. Winkler, Engl. Bot. Jahrb. 49 : 359 (1913), 57 : 598 (1922); Merrill, Phil. J. Sc. 9 : 359 (1914), 18 : 51 (1921); Merrill, Enum. Phil. Pl. 2 : 70 (1923); S. Moore, Journ. Bot. 63 Suppl.: 112 (1925); Gagnep. Bull. Soc. Bot. France 73 : 107 (1926); Ridley, Kew Bull. 1926 : 81 (1926); Furtado, Gard. Bull. Str. Settl. 9 : 252 (1937).

Number of species: about 35, chiefly in S. E. Asia, also in New Guinea.

Type-species: *Conocephalus suaveolens* Blume, l.c.

Conocephalus Dum.

Adopted: Hübener, Hep. Germ. 9 (1834); Bischoff, Nov. Act. Ac. L.-Car. 17 : 977 (1835); Schiffner, in Engl.-Pr. Nat. Pfl. f. 1(3) : 34 (1893); Horikawa, Sci. Rep. Tohoku Imp. Un. Biol. 4 : 395 (1929).

Number of species: 2 in the Northern hemisphere.

Type-species: *Conocephalus conicus* (L.) Dum. based on *Marchantia conica* L. Sp. pl. 1138, Hepaticae.

Poikilospermum Zipp. ex. Miq. Ann. Mus. Lugd. Bat. 1 : 203. 1864 is treated as a taxonomical synonym of *Conocephalus* Blume by Merrill.

Adopted taxonomically different or doubtful by: Bentham & Hook. Gen. Pl. 3 : 389 (1883); Durand, Ind. Gen. Phan. 378 (1888); Engler in Engl.-Pr. Nat. Pfl. f. 3(1) : 114 (1889); Dalla Torre & Harms, Gen. Siph. 124 (1907), no. 2002;

Adopted as correct name for Conocephalus Blume by: Merrill, Contr. Arn. Arb. 8 : 48 (1934), 35 transfers from Conocephalus Blume; Backer, Bekn. Fl. Java 6 (fam. 129, gen. 15) (1948).

Number of species: as *Conocephalus* Blume.

Type-species: *Poikilospermum amboinense* Zipp. & Miq. l.c.

Other synonyms available for *Conocephalus* Blume: *Corocephalus* D. N. F. Dietrich, Syn. pl. 1 : 425, 540, 1839; *Conocephala* Hasskarl, Catal. Bogor. alt. 78, 1844; *Conocephalopsis* O. Kuntze, Rev. gen. pl. 3(1) : 136, 1893, nom. prov. These three names are based on *Conocephalus suaveolens* Blume. They are not found adopted anywhere.

Discussion: The name *Conocephalus* has been used in Moraceae as well as in Hepaticae. Necker 1791 was the first author after 1753 who used the name listing it under "Spec. nat. Athrosophytorum" as a unitary name. According to the Stockholm Code, Art. 78(3) it is illegitimate. The next author using the name in the exact spelling *Conocephalus* was Dumortier 1822, again for a taxon in Hepaticae, the species *C. conicus* clearly to be regarded the type-species. Blume's name in Urticaceae (Moraceae) 1825 is invalid, unless it is conserved.

The situation in Hepaticae does not afford serious objections against this conservation of *Conocephalus* Blume. Two earlier names are available: *Conocephalum* Wiggers, Prim. Fl. Holsat. 82, 1780 and *Fegatella* Raddi, Opusc. sc. Bologna 2 : 356, 1818. Now there is a marked tendency in Hepaticology to use *Conocephalum* Wigg. However, the description of this genus clearly excludes *Marchantia conica* L., cited as a synonym after the type-species *Conocephalum trioicum* Wigg. If, therefore, *Conocephalum* should be abandoned (as is the opinion of the proposer), *Fegatella* is the correct name, a perfectly unambiguous name. If not, *Fegatella* were worth a proposal for conservation. In each case *Conocephalus* is out of the question for the genus of Hepaticae.

The situation in Phanerogams is considered to afford no objection against conservation either. *Conocephalus* Blume has been in general use up to 1934, with a few exceptions. The name *Poikilospermum*, taken up for it, is not invalid; however, it is not the correct name for the taxon of Blume, as two earlier names are available, *Conocephala* and *Corocephalus*. The last name might be due to an error; the first not. Taking up one of these names will mean that a number of new combinations should be made. This and the confusion arising from it can be avoided by conservation either of *Conocephalus* or *Poikilospermum*. *Conocephalus* Blume clearly fulfills the criteria of Art. 24.

Proposed by: W. D. Margadant, Wageningen.

Proposal no. 172

Proposal for the conservation of the generic name **Woodsia** R. Br. of the *Polypodiaceae* (see also Taxon 3(2): 76 and Recueil Synoptique, Paris p. 119, erroneously listed under Apocynaceae).

. *Woodsia* Robert Brown (1810) 158 obs. 4 corr. R. Br. (1815) 173.

Typus: *Woodsia ilvensis* (L.) R. Br.

Die Gattung *Woodsia* wurde von Robert Brown zuerst in seinem Prodromus Florae

Novae Hollandiae, 1 : 158 obs. iv. (1810) aufgestellt, allerdings unter dem Namen *Woodia*. In seiner Arbeit: "On Woodsia, a new Genus of Ferns" in Transact. Linn. Soc. London 11 : 170-174 (1815) ändert Brown dann den Namen ab in *Woodsia*, indem er schreibt, dass er das neue Genus seinem Freund Joseph Woods (1776—1864) zu Ehren nenne. Gleichzeitig aber verweist Brown auch auf seine frühere Diagnose der Gattung, schweigt sich aber über den dort stehenden Namen aus. Da der Name *Woodia* wiederum in der zweiten Auflage des Prodromus Florae Novae Hollandiae, curavit Nees Ab Esenbeck, 1 : 14/459 (1827) erscheint, so dürfte es wohl sicherer sein, den Namen *Woodsia* R. Br. (1815) 173 gegenüber dem früheren Namen *Woodia* R. Br. (1810) 158 obs. iv. ein für alle Mal zu schützen.

Proposed by: H. P. Fuchs, Basel.

Proposal no. 173

Proposal for the conservation of the generic name **Woodia** Schlechter (1894) of the *Asclepediaceae* (see also Taxon 3(2): 76 and Recueil Synoptique, Paris p. 119).

Woodia Schlechter apud Engler (1894) 30.

Typus: *Woodia verruculosa* Schlechter apud Engler.

Da der Name *Woodia* bereits von Robert Brown für eine Polypodiaceengattung vorweggenommen worden war, auch wenn dieser nachher den Namen in *Woodsia* abänderte und auch wenn einem andern englischen Botaniker zu Ehren genannt (John Medley Wood (1827—1915), so hätte Schlechter in seiner Arbeit: "Beiträge zur Kenntnis südafrikanischer Asclepiadaceen", ap. Engler, in Bot. Jahrb. 18, Beibl. No. 45 : 30 (1894) diesen Namen nicht verwenden dürfen und der Name müsste nach Art. 74 der rules verworfen werden. Es sei jedoch der Name *Woodia* Schlechter als nomen conservandum vorgeschlagen, da der gleichlautende Gattungsname von Brown eigentlich nie in Kombinationen verwendet wurde, obwohl gültig publiziert, da Brown die Umtaufungen erst in seiner zweiten Arbeit, in welcher er die Gattung *Woodsia* behandelt, vornahm.

Proposed by: H. P. Fuchs, Basel.

Proposal no. 174

Proposal for the conservation of the generic name **Urostachys** Herter of the *Lycopodiaceae* (see also Recueil Synoptique, Paris p. 118).

Nom. cons.: *Urostachys* Hert. Beih. Bot. Centralbl. II, 39 : 249. 1922.

Nom. rej.: *Huperzia* Bernh. in Schrad. Journ. Bot. (1800) 2 : 126. 1801 pt.; *Plananthus* P. Beauv. Prod. Aeth. 99. 1805 pt.; *Lepidotis* P. Beauv. Prod. Aeth. 101. 1805 pt.; *Stachygynandrum* P. Beauv. Prod. Aeth. 105. 1805 pt.

Begründung: *Huperzia* Bernh. ist ein Abspaltungsprodukt der Linnéschen Gattung *Lycopodium*, das zwischen *Osmunda* und *Struthiopteris* eingeschachtelt und weitab von der Gattung *Lycopodium* gestellt wird. Es werden keine Species genannt. Die Diagnose kann zur Not auf 250 *Urostachys*-Arten bezogen werden, die übrigen 150 heutigen *Urostachys*-Arten kämen in Bernhardis Gattung *Lycopodium* hinein, die im übrigen die heutigen Arten der Gattungen *Lycopodium* und *Selaginella* umfassen dürfte. Die Diagnose ist jedoch so kurz und ungenau, dass die Gattung nicht erkannt werden kann. Jedenfalls stimmt ihre Umgrenzung nicht mit der der heutigen Gattung *Urostachys* überein. Der Name *Huperzia* ist daher ein Nomen Dubium und damit zu verwerfen. — Rothmaler, Pteridoph. Stud. in Rep. 54. 1944, hat den Namen wieder hervorgeholt, ohne jedoch die notwendigen Umtaufungen zu vollziehen und die von ihm als Familie *Urostachydaceae* angesehenen Angehörigen der Gattung *Urostachys* konsequenterweise *Huperziaceae* zu benennen.

Palisot de Beauvois teilt die Linnésche Gattung *Lycopodium* in drei Genera auf, die jedoch in keiner Weise mit den heutigen Gattungen *Urostachys*, *Lycopodium* und *Selaginella* übereinstimmen. *Plananthus* enthält 17 *Urostachys*- und 3 *Lycopodium*-Arten, *Lepidotis* enthält 4 *Urostachys*- und 13 *Lycopodium*-Arten, *Stachygynandrum* enthält 2 *Urostachys*- und 6 *Lycopodium*-Arten. Keine der drei Gattungen stimmt auch nur entfernt mit der heutigen Gattung *Urostachys* überein. Die drei Namen sind daher ebenfalls als Nomina Dubia zu verwerfen. Die drei Gattungen enthalten sämtlich *Urostachys*- und *Lycopodium*-Arten in buntem Durcheinander, wie folgende drei Beispiele zeigen:

Aus Linné's *Lycopodium Carolinianum* macht er auf Seite 108 eine *Lepidotis*-Art, aus der Lamarckschen Umtaufung dieser Art *Lycopodium Pinnatum* macht er auf Seite 111 eine *Plananthus*-Art.

Lycopodium Gnidioides L. fil. stellt er auf Seite 110 zu *Plananthus*, das Synonym *Lycopodium Funiculosum* Lam. auf Seite 108 zu *Lepidotis*.

Lycopodium Verticillatum Gmel. stellt er

auf Seite 111 zu *Stachygynandrum*, auf Seite 112 zu *Plananthus* (Beides ist *Urostachys Squarrosus*).

Sollte einer dieser konfusen Namen dem Namen *Urostachys* vorgezogen werden, so würden sich über 400 Umtaufungen ergeben.

Literatur: Herter, G., Index Lycopodiorum, Montevideo. 1949. Daselbst weitere Literatur. Neuere Arbeiten in Revista Sudamericana de Botánica 1950—53.

Proposed by: G. Herter, Basel.

Proposal no. 175

Proposal for the conservation of (7887) **Rechsteineria** Regel (1848) of the Gesneriaceae versus *Gesneria* Mart. (1829) non *Gesneria* L. (1753) nec *Gesnera* Sw. (1800), *Allagophylla* Raf. (1837), *Megapleilis* Raf. (1837), *Styrosinia* Raf. (1837) and *Tulisma* Raf. (1837) (see also Recueil Synoptique, Paris p. 119).

Rechsteineria Regel, Flora 31 : 247 (1848) (Apr.) nom. conserv. prop.

Circumscription: Kuntze, Rev. Gen. Pl. 2: 474 (1891) and Fritsch, in Engler's Bot. Jahrb. 50 : 434 (1913).

Type species: *Rechsteineria allagophylla* (Mart.) Regel.

Size and area: About 75 species centered in Brazil and extending northward to Mexico.

Recognition: Baillon, in Bull. Soc. Linn. Paris 1 : 718 (1888); Kuntze, Rev. Gen. Pl. 2 : 474 (1891); Fritsch, in Engler's Bot. Jahrb. 50 : 434 (1913) and 54, beibl. 119 : 36 (1916); Knuth, Initia Flor. Venez. 646 (1928); Curtis, in Gard. Chron., ser. 3, 90 : 410 (1931); Söderberg, in Svensk Bot. Tidskr. 29 : 127 (1935); Hjelmqvist, in Bot. Notiser 1937 : 295; Pittier, Cat. Fl. Venez. 2 : 396 (1947).

Horticultural importance: A number of species of this genus have long been cultivated, for the most part under the name Gesneria or Gesnera. In the Royal Hort. Soc. Dict. Gard. 2 : 886 (1951), Chittenden lists 19 species of which a lesser number is actually in general cultivation today.

Discussion: In Nov. Gen. & Sp. Pl. 3 : 27 (1829), Martius applied the name Gesnera (as a corrected form of Gesneria) to a group of 12 Brazilian species and referred the two original Linnaean species, *G. humilis* and *G. tomentosa*, to the genera Conradia Mart. and Rhytidophyllum [Rytidophyllum] Mart. respectively. The great majority of subsequent writers followed and amplified his concept until the period of 1888 to 1894 when Baillon, Kuntze and Fritsch restored Gesneria to its original circumscription. Kuntze, Rev. Gen. Pl. 2 : 473 (1891), retained Gesneria L. in its broadest sense for a group of West Indian species including both of the original components. Fritsch, in Engler & Prantl, Nat. Pflanzenfam. IV, 3b : 183 (1894), and Urban, in Symb. Antill. 2 : 369 (1901), restricted Gesneria to include *G. humilis* L. and close allies and referred *G. tomentosa* to Rhytidophyllum. Unless rejected in favor of Gesnera Mart. under provisions of Article 57, International Code of Botanical Nomenclature, Gesneria L. must be retained for the group of species including *G. humilis* L. and another name is required for the genus as circumscribed by Martius. Reasons for not proposing Gesnera Mart. for conservation are discussed with that name in following paragraphs.

Baillon, Bull. Soc. Linn. Paris 1 : 718 (1888), noted that Rechsteineria was the earliest name that could be applied to the Brazilian and allied species of Gesnera Mart. but he, like almost all other students, overlooked four prior names of Rafinesque. These names, Allagophylla, Megapleilis, Stryrosinia and Tulisma, appeared in 1837 and except for the first have never been recognized. Post and Kuntze, Lexicon Gen. Phanerog. 18 (1904) accepted Allagophylla and reduced the remaining three names of Rafinesque to synonymy along with three later names, Corytholoma (Benth.) Decne., Dircaea Decne. and Rechsteineria Regel. They made no combinations and to accept Allagophylla as a name for the genus on the basis of strict priority would entail the making of new combinations for all but one species and the loss of a more familiar name for a genus of some horticultural importance. Inasmuch as it has been common practice to reject overlooked names of Rafinesque, one of the three later names may be considered for conservation.

Of these names, Rechsteineria has priority by nine months over Corytholoma and Dircaea but for reasons to be noted, at least Corytholoma merits consideration as a nomen conservandum propositum. Both Dircaea and Corytholoma appeared on the same page of an article by Decaisne and the former was reduced to synonymy of the latter by Fritsch in Engler & Prantl, Nat. Pflanzenfam. IV, 3b : 181 (1894). Under provisions of Article 67, International Code of Botanical

Nomenclature, Dircaea need not be discussed further.

A number of arguments may be presented for the conservation of Corytholoma and for that reason the following detailed information is provided:

Corytholoma (Benth.) Decne. in Rev. Hort. 20 : 466 (1848) (Dec.).

Circumscription: Fritsch, in Engler & Prantl, Nat. Pflanzenfam. IV, 3b : 180 (1894) and Dalla Torre & Harms, Gen. Siphonog. 477, no. 7887 (1904), equivalent in all respects to the current circumscription of Rechsteineria.

Type-species: The genus was based on *Gesneria sect. Corytholoma* Benth. in Plant. Hartweg. 230 (1846) which included a single species, *G. stachydifolia* Benth. This species must stand as type of the genus but has not yet been transferred to Corytholoma. Decaisne discussed only those species cultivated in Europe at the time and omitted any direct reference to *G. stachydifolia*.

Size and area: As for Rechsteineria.

Recognition: Fritsch, in Engler & Prantl, Nat. Pflanzenfam. IV, 3b : 180 (1894); Siebert & Voss, Vilmorin's Blumengärtnerei 1 : 787 (1894); Kuntze, Rev. Gen. Pl. 3 : 240 (1898); Fritsch, in Bihang till Svensk. Vet. — Akad. Handl. 24, afd. 3, no. 5 : 19 (1898); Fritsch, in Engler's Bot. Jahrb. 29, beibl. 65 : 18 (1900); Dalla Torre & Harms, Gen. Siphonog. 477 (1904); Fritsch, in Engler's Bot. Jahrb. 37 : 497 (1906); Sprague, in Kew Bull. 1908 : 20 and in Bot. Mag. 134 : t. 8228 (1908); Usteri, Flora der Umgebung der Stadt São Paulo 238 (1911); Löfgren, Man. Fam. Nat. Phaner. Brazil 485 (1918); Bonstedt, Parey's Blumengärtnerei 2 : 401 (1932); Bailey, Hortus 179 (1930) and Hortus Second 209 (1941); Hoehne, Kuhlmann & Handro, O Jardim Botanico de São Paulo 595 (1941); Lemée, Dict. Descr. Gen. Pl. Phan. 2 : 329 (1930), 8b : 736 (1943).

It will be seen from the above that Corytholoma has been accepted in both botanical and horticultural literature. In its narrowest application, equivalent to a section of the genus as interpreted by Fritsch, it includes a large number of species (ca. 23) while Rechsteineria in a similarly restricted sense applies to only two species. At least three species are currently listed in commerce in the United States and Europe under this name. A total of nine species of primary horticultural interest were listed by Siebert & Voss and by Bailey.

On the other hand, Rechsteineria has priority over Corytholoma. On this basis it was accepted by Fritsch in his later work and has been used by more recent students. All but four species have been formally transferred to Rechsteineria as opposed to Corytholoma in which about thirty new combinations will be needed, including one for the type species. Three species are currently listed in commerce under the name Rechsteineria.

Although Corytholoma has been more widely accepted in horticultural literature than Reichsteineria, both generic names are used for about an equal number of species in general commerce and a similar number of species referable to the genus are listed in catalogs as species of Gesneria. Siebert & Voss and Bailey together listed a total of only nine species of primary horticultural interest while some nineteen were listed under Gesneria as recently as 1951 by Chittenden. There seems to be neither sufficient uniformity of treatment nor sufficient preponderance of horticultural usage to warrant proposing Corytholoma for conservation when one takes into account its lack of priority and the large number of new combinations that would become necessary if it were to be conserved.

Recommendation: A similar discussion under Gesnera points out reasons for not conserving that name and following more recent botanical treatments, Rechsteineria is proposed for conservation.

Gesnera Mart., Nov. Gen. & Sp. Pl. 3 : 27 (1829) non *Gesneria* L., Sp. Pl. 2 : 612 (1753) and Gen. Pl. ed. 5 : 267 (1754) nec *Gesnera* Sw., Fl. Ind. Occ. 2 : 1015 (1800). nom. rejic. prop.

Type-species: not designated.

Size and area: Originally 12 species of Brazil including representatives of all the currently recognized subdivisions of Rechsteineria.

Recognition: DeCandolle, Prod. 7 : 526 (1838) pro max. parte; Endlich., Gen. Pl. 721, n. 4165 (1839); Regel, in Flora 31 : 246 (1848); Decne., in Rev. Hort. 20 : 465 (1848); Jacques & Herincq, Man. Gén. des Plantes 2 : 564 (1850) pro parte; Hanst., in Linnaea 26 : 203 (1854); Hanst., ex. Mart., Fl. Bras. 8(1) : 349 (1864); Hanst., in Linnaea 34 : 236 & 257 (1865); Benth. & Hook. f., Gen. Pl. 2 : 1003 (1876); Durand, Ind. Gen. Phan. 302 (1888); Nichols., Ill. Dict. Gard. 2 : 65 (1885) pro max. parte; Bellair & St.-Leger, Plant. des

Serres 850 (1899); Bailey, Cycl. Amer. Hort. 2 : 641 (1901) (Gesneria); Beddome, in Journ. Roy. Hort. Soc. 33 : 87 (1908); Bailey, Stand. Cycl. Hort. 3 : 1333 (1915) (Gesneria); Pittier, Man. Plant. Usual. Venez. 155 (1926); Chittenden, Roy. Hort. Soc. Dict. Gard. 2 : 886 (1951) (Gesneria); Augusto, H. Rio grande do Sul 383 (1946).

Illustrations: About 100.

Discussion: The general history of Gesnera Mart. has been reviewed in prior discussion under Rechsteineria. Under Article 57, International Code of Botanical Nomenclature, Gesnera Mart. might be proposed for conservation versus Gesneria L. (Gesnera Sw.). Martius' concept has been followed by very many writers and has gained wide acceptance botanically and horticulturally. Most of the species now referred to Rechsteineria were originally published as species of Gesneria or Gesnera, the two names having been used more or less interchangeably for over a century.

The reasons for retaining Gesneria in the Linnaean sense and rejecting Gesnera Mart., however, are weighty. Gesneria L., with upwards of 35 species, has been and is now accepted in its original sense by Swartz, Prodr. 89 (1788) and Fl. Ind. Occ. 2 : 1015 (1800) (Gesnera); Baillon, in Bull. Soc. Linn. Paris 1 : 717 (1888); Kuntze, Rev. Gen. Pl. 2 : 473 (1891); Fritsch, in Engler & Prantl. Nat. Pflanzenfam. IV, 3b : 183 (1894); Urban, Symb. Antill. 2 : 369-383 (1901); Dalla Torre & Harms, Gen. Siphonog. 477, n. 7891 (1904); Boldingh, Flora Ned. West Ind. 366 (1913); Urban, Symb. Antill. 8 : 646 (1921); Britton & Wilson, Bot. Porto Rico 2 : 204 (1925); Barker & Dardeau, Flore d'Haiti 343 (1930); Morton ex Standley, Flora Costa Rica 1177 (1938); Moscoso, Cat. Fl. Doming. 588 (1943). To reverse the widespread acceptance of Gesneria L. during the past 60 years would have adverse and farreaching consequences in floristic work.

In horticulture, the name Gesneria has become confused and has been attached to species of such genera as Kohleria and Smithiantha. It has been supplanted in part by both Rechsteineria und Corytholoma. Inasmuch as very few species of Gesneria L. are cultivated, and those primarily in botanical gardens or special collections, abandonment of the name as it has been used in horticulture and the substitution of one more clearly circumscribed would tend to eliminate confusion in the naming of species more widespread in cultivation with eventual stability of nomenclature in horticulture.

Allagophylla Raf., Fl. Tellur. 2 : 33 (1836) (1837) as *Alagophyla*, nom. rejic. prop.

Type-species: *A. dasyanthes* Raf. based on *Gesnera allagophylla* Mart. (as Martens).

Size and area: Monotypic in Brazil as interpreted by Rafinesque.

Recognition: Post & Kuntze, Lexicon Gen. Phanerog. 18 (1904) where interpreted in a broad sense comparable to the present circumscription of Rechsteineria with Corytholoma, Dircaea, Megapleilis, Rechsteineria, Styrosinia and Tulisma reduced to sectional status or synonymy.

Discussion: Under Article 67, International Code of Botanical Nomenclature, the action of Post & Kuntze presumably makes the rejection of other Rafinesque names unnecessary if Allagophylla is rejected and the present circumscription is maintained. Although this is the earliest name for the genus new combinations for all but one species would be necessary if it were accepted and an unfamiliar name would replace one now known in botany and horticulture.

Megapleilis Raf., Fl. Tellur. 2 : 57 (1836) (1837), nom. rejic. prop.

Type-species: *M. tuberosa* Raf. based on *Gesnera bulbosa* Ker-Gawl.

Size and area: Monotypic in Brazil as interpreted by Rafinesque.

Recognition: Reduced to synonymy of Allagophylla by Post and Kuntze.

Styrosinia Raf., Fl. Tellur. 2 : 95 (1836) (1837), nom. rejic. prop.

Type-species: *S. coccinea* Raf. based on *Gesnera aggregata* Lindl. and *G. pendulina* Lindl. which he considered synonymous following Hooker in Bot. Mag. 54 : t. 2725 (1826).

Size and area: Monotypic in Brazil as interpreted by Rafinesque.

Recognition: Reduced to synonymy of Allagophylla by Post and Kuntze.

Tulisma Raf., Fl. Tellur. 2 : 98 (1836) (1837), nom. rejic. prop.

Type-species: *T. verticillata* (Hook.) Raf. based on *Gesneria verticillata* Hook.

Size and area: Monotypic in Brazil as interpreted by Rafinesque.

Recognition: Reduced to synonymy of Allagophylla by Post and Kuntze.

Proposed by: H. E. Moore, Jr., Bailey Hortorium, Cornell University, Ithaca, N.Y.

Proposal no. 178

Proposición de Conservación del género **Wilbrandia** *(Cucurbitaceae)*: 8565, *Wilbrandia* Silva Manso, Enum. Subs. Catarz. Bras. p. 30, 1836, *versus Wilbrandia* Presl *(Boraginaceae)*, in Oken, Isis 21 : 273, 1828 (= *Cordia* L.) (Etiam vide Recueil Synoptique, Paris, p. 119).

Wilbrandia Silva Manso *(Cucurbitaceae)*:

Adoptado por: Endlicher, Gen. supl. 3 : 91. 1843; Naudin, Ann. Sc. Nat. 4a ser. 16 : 184. 1862; Bentham y Hooker, Gen. 1 : 831. 1867; Cogniaux, in Martius, Fl. Bras. 6(4) : 29. 1878; Cogniaux, in DC., Monogr. Phan. 3 : 565. 1881; Baillon, Hist. Pl. 8 : 449. 1889; Pax y Hoffmann, in Engl. u. Prantl, Pflanzenfamilien 4(5) : 15. 1889; Cogniaux, in Engl., Pflanzenreich 4(275, 1) : 69. 1916; Lemée, Dict. Gen. 6 : 929. 1935; Martinez Crovetto, Bol. Soc. Arg. Bot. 1 : 312. 1946.

Especie lectotipo: *W. hibiscoides* S. Manso.

Distribucion geográfica: Sudamérica austral.

Número de especies: alrededor de 15.

Wilbrandia Presl *(Boraginaceae)*:

Adoptado por: Nadie.

Especie tipo: *W. paniculata* Berl (= *Cordia paniculata* Sieb.)

Distribucion geográfica: Martinica.

Número de especies: una.

Discusion: *Wilbrandia* Manso es un género de Cucurbitáceas que ha sido aceptado por los autores, sin excepción, varios de los cuales se enumeran en la lista anterior, pese a la existencia de *Wilbrandia* Presl, que tiene ocho años de prioridad. El hecho de suprimir *Wilbrandia* Manso obligaria a la creación de un nuevo género, ya que no tiene ningun sinónimo, y a hacer la transferencia de casi una quincena de especies, lo cual, sin contribuir en nada al progreso de la Botánica, solo complicaría la sinonimia, con las dificultades que ésto trae aparejado. Además, por el hecho de haber sido utilizado durante mas de cien años, cumple con las condiciones establecidas en el Art. 24 de las reglas de nomenclatura. Creo, de consecuencia, que *Wilbrandia* Manso debe ser declarado *nómina conservanda* contra *Wilbrandia* Presl.

Propuesto por: Raúl Martínez Crovetto, Buenos Aires.

Proposal no. 179

Proposal for the conservation of the generic name **Lomaria** Willd. (1809) of the *Polypodiaceae*.

Lomaria Willd. in Mag. Natf. Freunde Berlin 3 : 160. 1809 nom. gen. prop.

Struthiopteris (Haller, Enum. meth. stirp. Helv. 132. 1742) Scop. Fl. Carn. 168. 1760 nom. rej. prop.

Typus: *Lomaria spicant* (L.) Desv. (1811).

Diskussion: Spaltet man die Gattung *Blechnum* L. (1753), Spec. pl. ed. 1. 2 : 1077 sensu lato in zwei Gattungen auf, wie dies in neuerer Zeit des öfteren getan wird (cfr. e.g. C. Christensen ap. Verdoorn [1938], Man. Pter. 540), so muss der oben genannte Gattungsname, der allgemein für den einen Teil der Gesamtgattung *Blechnum* L. verwendet wird, auf die Liste der nomina generica conservanda gesetzt werden. Der Gattungsnamen *Blechnum* L. mit dem Typus *Blechnum orientale* L. (1753), Spec. pl. ed. 1. 2 : 1077 muss im eingeschränkten Sinne auf diejenige Gruppe von Farnen der Gesamtgattung *Blechnum* L. angewandt werden, deren fertiles und steriles Laub gleichgestaltet ist. Der Gattungsname *Lomaria* Willd. dagegen umfasst all jene Arten von *Blechnum* L. sensu lato, deren fertiles Laub vom sterilen verschieden ist. Als Typus der Gattung *Lomaria* Willd. muss *Lomaria spicant* (L.) Desv. angesehen werden. Die Konservierung des Namens *Lomaria* Willd. wird deshalb notwendig, weil auf demselben Typus wie bei *Lomaria* Willd. bereits ein halbes Jahrhundert früher eine Gattung begründet worden war, nämlich *Struthiopteris* Scop. Scopoli (1760), Fl. Carn. 168 entnimmt seinen Gattungsnamen aus Haller (1742), Enum. meth. stirp. Helv. 132, d.h. aus demselben Verfasser, aus dem ca. fünfzig Jahre später Willdenow (1809), in Mag. Natf. Freunde Berlin 3 : 160 seinen, allerdings eine andere Gattung, nämlich *Matteuccia* Todaro (1866), in Giorn. Sc. Nat. Econ. Palermo 1 : 235 bezeichnenden Namen entnahm. Endlich kommt noch ein dritter Autor hinzu, der einen, wenn auch nicht gleichen, so doch ausserordentlich ähnlichen Namen, nochmals eine andere Gattung, nämlich *Osmunda* L. (1753) Spec. pl. ed. 1. 2 : 1099 bezeichnend, verwendet, *Struthopteris* Bernhardi ap. Schrader (1801), Journ. f. d. Bot. 2 : 126. Ueber den Grund dieser verschiedenartigen Anwendung des Haller'schen Namens hat sich bereits Woynar (1913), in Mitt. Natw. Ver. f. Steierm. 49 : 188-191 (1912) ausführlich geäussert. Die bei Haller

(1742), Enum. meth. stirp. Helv. 132 aufgestellte Art, bezw. Gattung umfasst nicht weniger als vier verschiedene Bestandteile, nämlich in Bezug auf die fertilen Wedel *Matteuccia Struthiopteris* Todaro und *Lomaria spicant* (L.) Desv., in Bezug auf die sterilen Blätter aber *Dryopteris Filix-mas* (L.) Schott und *Thelypteris limbo-sperma* (All.) Fuchs (= *Polypodium Oreopteris* Ehrh.). Nach den internationalen Regeln für die Nomenklatur müsste demzufolge diejenige Emendierung des Haller'schen Namens angenommen werden, die am frühesten vorgenommen worden war, d.h. die Verwendung von *Struthiopteris* (Haller) im Sinne von Scopoli (1760), Fl. Carn. 168 für die von *Blechnum* L. sensu stricto abzutrennende Gattung. Wie aus dem zuvor Gesagten jedoch wohl deutlich genug hervorgeht, kann *Struthiopteris* als Gattungsnamen kaum aufrechterhalten werden, wie er ja auch in seiner Anwendung auf die, nun *Matteuccia* Todaro genannte Gattung verworfen wurde. (cfr. Taxon 3[2] : 70/71).

Proposed by: H. P. Fuchs, Basel.

News and Notes

NOMENCLATURE COMMITTEES

On 5 March 1954 M. Leandri from Paris sent in his resignation from the Special Committee for Phanerogamae and Pteridophyta.

Dr P. C. Silva, Department of Botany, University of Illinois, Urbana, Ill., U.S.A. will replace the late Prof. O. C. Schmidt as member of the Special Committee for Algae.

A special meeting of the Committee for Urgent Nomenclatural Needs will be convened during the nomenclature sessions of the Paris Congress in order to discuss the problem of the typification of Amaryllis belladonna L.

The attention of all members of the nomenclature committees is drawn to the circumstance that the sessions of the Section Nomenclature of the Paris Congress will be held before the Congress itself from Monday 28 June (9 a.m.) until Thursday 1 July 1954. Committee meetings can be convened during that period.

PARIS CONGRESS

Section Nomenclature

The sessions of the Nomenclature Section of the Paris Congress will be held from Monday 28 June (9 a.m.) to 1 Juli 1954. All persons entitled to a vote in the sessions received a copy of the "Recueil Synoptique des Propositions" in the course of April 1954. They were urgently requested to return their voting papers by airmail and before 15 May 1954 to the office of the Rapporteur-Général, The International Bureau for Plant Taxonomy and Nomenclature, Lange Nieuwstraat 106, Utrecht, Netherlands.

All persons planning to attend the sessions are invited to collect their voting cards at the Bureau of Nomenclature of the Congress. The exact address of this Bureau will be communicated a few weeks before the Congress but it will always be possible to obtain information at the secretariat of the Laboratoire de Phanérogamie, Muséum d'Histoire Naturelle, Rue Cuvier 57, Paris V.

Avis préalables

The "Avis préalables" on the nomenclature proposals will be published in the June number of this year's Taxon. They will include the results of the preliminary mail ballot. Since, in many instances, this number will arrive late in June at its destinations, members of the Nomenclature section will receive an extra copy upon arrival in Paris. Everyone is requested, however, to bring his own copy of the "Recueil Synoptique".

CARLOS ALBERTO O'DONELL (1912—1954)

Carlos A. O'Donell was born at Buenos Aires, Argentina, 11 October 1912, and died in Tucuman, Argentina, 14 February 1954. A pharmaceutical student in his earlier years, Dr O'Donell graduated cum laude at the University of Buenos Aires in 1937. In the same year he became a member of the scientific staff of the Instituto Miguel Lillo in Tucuman and during these last years of his life he was in charge of the section Phanerogams and curator of the herbarium. He was an Associate Professor of general botany at the Faculty of biochemistry, chemistry and pharmacy. Dr O'Donell was secretary of the journal Lilloa and occupied many honorary positions in the Argentine botanical world.

He played an important part in the building up of the herbarium of the Instituto Miguel Lillo to its present shape by means of his active policy of exchange and his web of collectors all over Latin America. Notwithstanding cruel physical suffering O'Donell continued to work as long as possible in order to reach, with a truly heroic effort, at least part of his scientific goals.

P. BROWNE'S GENERIC NAMES

Recently I have several times come across a remark to the effect that because P. Browne in his "Nat. Hist. Jamaica" did not consistently employ binomial nomenclature, his generic names would be illegitimate according to Art. 79 quater.

Recently Miss Lourteig went even as far as to say that Browne's work "is to be eliminated from botanical literature" (cf. Taxon 2 : 140. 1953).

This opinion goes possibly back to an erroneous remark by Rendle in his article on Browne's work, in which he stated that "Under no recognized rule of nomenclature can the names as originated by Patrick Browne take precedence of or compete with subsequently published names" (Journ. Bot. 50 : 129. 1912). Cf. also Urban, Symb. Antill. 1 : 18-28. 1898.

As a matter of fact Browne did distinguish genera and species; instead of giving epithets he numbered the species. He did not give generic descriptions if more than one species was distinguished, but as far as his generic names are accompanied by a description — which is the case in all monospecific genera — they are perfectly legitimate.

The Rules also recognize their legitimacy, otherwise none ought to have been rejected and none ought to have been conserved (cf. nos 358, 2339, 2412, 2717, 8399 and others in the list of nom. gen. cons. in the Code). Also none should be in common use such as Cuphea, Sapium, Acidanthera, Struchium, etc.

Art. 79, to which Miss Lourteig refers, is only of importance for specific epithets. In passing, if that was not the case, any work dealing with genera only would be in a similar position. C. G. G. J. van Steenis

REQUESTS

Prof. R. van der Wijk, Botanical Laboratory of the State University, Groningen, Netherlands requests to be informed about the place where the following materials are being preserved:

1) The type material of *Dawsonia superba* Greville, Ann. & Mag. Nat. hist. 19 (1847): 226 (fig. 12). A single female specimen was sent to *Greville* (Professor in Edinburgh) by his friend *Augustus Erskine,* a few years before 1847. The plant may be collected in Australia or in New Zealand, since the collection sent by *Erskine* included both Australian and New Zealand plants.
2) Material of *Dawsonia lamii* Reimers, collected by *Lam* in New Guinea, 11-XI-1920, no 1980, Mt Doorman, Riverbivouac, 2480 m. The original material in herb. Berlin has been damaged.
3) Material, prov. named *Dawsonia crispata,* collected by *Lam* in New Guinea, 16-X-1920, no 1731 (or 1741), Mt Doorman, Radiobivouac, about 3200 m. (Probably figured in Lam, Vegetationsbilder aus dem Innern New Guinea on Table 29, A, B as Polytrichum?).

* * *

Dr Vernon S. Forbes, Rhodes University, Grahamstown, South Africa is eager to discover additional data with regard to the lives and travels of the Austrian plant collectors from Schönbrunn, *Francis Boos* and *Georg Scholl.* At present nothing is known beyond the bare facts that they visited the Cape about 1786 and that they may have travelled with Colonel R. J. Gordon.

NOTICES OF BOOKS

Rumanian Uredinales

Monografia Uredinalor din Republica populara Romana de Acad. Traian Savulescu, Editura Academiei Republicii populare Române, 1953. 2 Vols, p. 1-1166.

A well documented, richly illustrated exhaustive treatment of the Rumanian Uredinales. The importance of this major work reaches far beyond that of a local treatment.

International Scolars Forum

International Scolars Forum, a series of books by American Scolars, *published by* N.V. M. Nijhoff, the Hague.

The underlying idea of this series is the recognition that publishing costs are much lower on the European continent than in the U.S. A group of U.S. Scientists has therefore entered into an agreement with Martinus Nijhoff of the Hague to receive manuscripts, appraise them and make recommendations regarding publication.

For further information apply to the librarian of the Honnold Library, Claremont - California, U.S.A.

Rocky Mountain Naturalists

Rocky Mountain Naturalists, by Joseph Ewan, The University of Denver Press, s.d.

Biographies of nine leading naturalists of the Rocky Mountain area supplemented by a roster in biographical dictionary form of natural history collectors 1682—1952. 358 pp, 9 plates.

Office

The International Bureau for Plant Taxonomy and Nomenclature, 106 Lange Nieuwstraat, Utrecht — Netherlands.

TAXON

Vol. I nos 1—9, 1951—1952; Vol. II nos 1—8, 1953; Vol. III nos 1—x, 1954.

Backnumbers (Vol. I no. 3 excepted) are available for all members. Those who joined the I.A.P.T. on or after 1 Jan. 1954 can buy Vol. I (no. 3 excepted) against $ 2.— and Vol. II (complete) against $ 3.— per copy. Single numbers are free for all regular members.

N.B. Vol. II consists of 8 numbers.

Regnum Vegetabile

Vol. 1. *Seventh International Botanical Congress, Section Nomenclature;* report by J. Lanjouw, Rapporteur-Général; reprinted from the Proceedings of the Stockholm Congress, Uppsala 1953, distributed from Utrecht 1 March 1954. *Free* for all 1951-1953 members. Free copies are available for 1954 regular members (on request).

Vol. 2. *Index Herbariorum.*

Part I *The Herbaria of the world.* Second, revised, edition, 1 January 1954.
Institutional members and regular individual members: **free**.
Others: D. fl. 13.30.

Part II *Collectors.* First instalment (A-D), 1 March 1954.
Institutional members: **free**.
Regular Individual members: D. fl. 7.60 ($ 2.—; sh. 15/-).
Others: D. fl. 14.50.

Vol. 3. *International Code of Botanical Nomenclature.*

Cheap edition, 15½ x 24 cm, buckram, 1 December 1953.
Regular individual members: D. fl. 5.50 ($ 1.40, sh. 10/-).
Others: D. fl. 10.— (Not yet available for non-members residing in the U.S.A.).

Vol. 4. *Recueil Synoptique des Propositions concernant la nomenclature botanique, soumises au Huitième Congrès International de Botanique, Paris 1954;* March 1954.
Institutional and regular individual members: **free**.
Others: D.fl. 9.50.

REGIONAL TREASURERS

Austria: Dr K. H. Rechinger, Naturhistorisches Museum, Botanische Abteilung, Burgring 7, Wien.

Belgium: Prof. W. Robyns, Rijksplantentuin, 236 Koninklijke Straat, Brussel.

Canada: Prof. J. Rousseau, Montreal Botanical Garden, 4101 Sherbrooke Street East, Montreal, Que.

Egypt: Mr Mohammed Drar, Fouad I Agricultural Museum, Dokki, Cairo.

France: M. H. Jacques-Felix, 45 bis Avenue de la Belle Gabrielle, Nogent-sur-Marne, Seine. C.C.P. Paris 2243-12.

Germany: Dr Walter Domke, Staatsinstitut für Allgemeine Botanik, Jungiusstrasse 6, Hamburg 36.

Great Britain and British Overseas Territories: Mr A. A. Bullock, The Herbarium, Royal Botanic Gardens, Kew, Richmond, Surrey, England.

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Norway: Prof. K. Faegri, Universitet I Bergen, Botanisk Museum, Bergen.

Sweden: Mr Bo Peterson, Botaniska Museet, Lund. Postgiro 43.35.39.

U.S.A.: Dr R. C. Rollins, Gray Herbarium, Harvard University, 79 Garden Street, Cambridge 38, Mass.

"Taxon" is directed by: Prof. J. Lanjouw, Chief Editor, and Dr F. A. Stafleu, Assistant Editor. All correspondence should be sent to the International Bureau for Plant Taxonomy and Nomenclature, 106 Lange Nieuwstraat, Utrecht — Netherlands.
All members of I.A.P.T. receive "Taxon" free of charge. Copies of personal members are for private use only and should not be placed in official libraries.